

Sequence_Listing_0088562_015US0.TXT
SEQUENCE LISTING

<110> ACE Biosciences A/S
<120> Campylobacter polypeptides
<130> 0088562-015US0
<150> PCT/DK2004/000803
<151> 2004-11-19
<150> DK PA 2003 01726
<151> 2003-11-21
<150> US 06/524,617
<151> 2003-11-25
<160> 123
<170> PatentIn version 3.5
<210> 1
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<213> Campylobacter jejuni (SEQ ID NO:1 - Cj0092)
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Met Lys Lys Ile Leu Phe Ile Gly Ser Leu Val Met Ala Ser Leu Leu
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Tyr Ala Gln Gly Ser Gln Pro Val Glu Ile Thr Gln Gln Asp Ile Asn
20 25 30
Thr Gln Asn Glu Met Ser Asp Ala Ser Thr Lys Asp Ile Thr Pro Lys
35 40 45
Ser Ile Glu Asp Phe Phe Glu Glu Phe Ala Asp Asn Phe Gly Ile Glu
50 55 60
Tyr Gly Ile Thr Lys Asp Gly Lys Thr Phe Tyr Thr Gly Lys Ser Thr
65 70 75 80
Val Ala Val Asn Asp Thr Asp Pro Gln Phe Ala Gln Ala Leu Gln Asn
85 90 95
Ala Tyr Gln Lys Ala Met Leu Asn Leu Gln Ser Glu Phe Ile Arg Asp
100 105 110
Ala Phe Gly Arg Ile Ala Thr Ser Lys Ile Gln Asn Tyr Glu Ala Asp
115 120 125
Asn Ser Thr Asn Ala Lys Glu Phe Asp Glu Leu Pro Lys Gly Asp Lys
130 135 140

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Val Asp Gln Ile Leu Asn Lys Leu Thr Gln Leu Ala Gly Ala Gln Leu
145 150 155 160

Asp Lys Ala Leu Lys Asp Leu Gly Ile Asp Thr Asn Ser Leu Ser Glu
165 170 175

Asp Arg Lys Lys Thr Leu Leu Lys Gln Glu Phe Leu Asn Lys Thr Met
180 185 190

Thr Asn Ala Ile Gly Ser Met Ser Gly Leu Val Pro Val Gln Thr Ile
195 200 205

Val Thr Gln Arg Arg Gly Glu Tyr Asp Val Gly Val Val Ala Val Ile
210 215 220

Ser Asn Lys Thr Arg Gln Leu Ala Lys Asp Met Ala Leu Ala Arg Gln
225 230 235 240

Ser Ala Ile Lys Gly Lys Gly Lys Ala Ile Ser Glu Tyr Leu Pro Lys
245 250 255

Asp Thr Lys Gly Phe Leu Asn Glu Tyr Gly Ile Arg Leu Val Tyr Asp
260 265 270

Glu Asn Gly Ala Pro Ile Ile Leu Ser Tyr Gly Asn Trp Gly Tyr Val
275 280 285

Ala Asp Pro Ser Asn Ala Lys Lys Thr Asn Ile Leu Glu Asp Arg Ala
290 295 300

Lys Glu Thr Ala Leu Thr Met Ala Asp Ala Ala Ile Ile Glu Phe Ile
305 310 315 320

Asn Thr Asn Leu Ser Leu Lys Asp Glu Arg Thr Thr Gly Asp Thr Tyr
325 330 335

Glu Glu Ile Ile Lys Gln Ser Ile Asn Val Asn Asp Ser Ser Thr Gln
340 345 350

Glu Gln Thr Gln Asn Ile Thr Asn Ile Ile Asp Lys Val Asn Ser Lys
355 360 365

Ile Lys Ala Ser Ala Ser Gly Lys Ile Arg Gly Ile Arg Thr Leu Lys
370 375 380

Lys Trp Ser Tyr Thr Ser Glu Asn Gly Ile Glu His Val Gly Ala Val
385 390 395 400

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Arg Phe Tyr Ser Tyr Glu Asn Leu Ala Asn Thr Asn Glu Ala Leu Asn
405 410 415

Ser Lys Ser Asn Ala Thr Lys Asn Glu Ala Lys Lys Ser Ser Ser Ile
420 425 430

Gln Arg Ser Ser Asn Val Val Asn Ser Met Asp Asp Phe
435 440 445

<210> 2
<211> 412
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:2 - Cj0005)

<400> 2

Met Lys Gln Asn Asp Gln Lys Glu Asn Arg Arg Asp Phe Leu Lys Asn
1 5 10 15

Ile Gly Leu Gly Leu Phe Gly Ile Ser Val Leu Ser Asn Phe Ser Phe
20 25 30

Glu Asn Phe Leu Gly Ser Lys Ala Leu Ala Lys Glu Leu Pro Asp Phe
35 40 45

Lys Ile Glu Gly Lys Lys Asp Leu Ile Tyr His Gly Glu Lys Pro Leu
50 55 60

Thr Ala Glu Thr Glu Ile Tyr Ala Leu Asp Ser Asp Phe Thr Lys Pro
65 70 75 80

Glu Asn Phe Phe Val Arg Asn Asn Gly Leu Pro Pro Ser Leu Glu Thr
85 90 95

Ile Lys Glu Arg Leu His Lys Gly Trp Thr Leu Glu Ile Asp Gly Glu
100 105 110

Ser Ile Ile Asn Lys Lys Ser Tyr Thr Ile Glu Asp Leu Lys Lys Lys
115 120 125

Phe Lys Thr Tyr Thr Tyr Ala Leu Thr Val Glu Cys Gly Gly Asn Gly
130 135 140

Arg Ser Glu Val Ile Pro Ser Thr Lys Gly Thr Gln Trp Gly Tyr Gly
145 150 155 160

Ala Val Ala Cys Gly Arg Trp Thr Gly Val Arg Leu Lys Asp Ile Leu
165 170 175

Lys Asp Cys Gly Ile Lys Asn Asp Ala Val Tyr Ile Gly Tyr Tyr Gly

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180                                     185                                     190
Ile Asp Thr Lys Leu Asn Gly Glu Glu Thr Ser Pro Ile Ser Arg Gly
    195                                     200                                     205

Val Pro Ile Ser Lys Ala Leu Gln Asp Glu Thr Leu Ile Ala Trp Ala
    210                                     215                                     220

Tyr Glu Gly Lys Asp Ile Pro Leu Val Asn Gly Tyr Pro Leu Arg Leu
    225                                     230                                     235                                     240

Val Cys Gly Gly Tyr Pro Ala Ser Thr Ser Gly Lys Trp Leu Tyr Lys
    245                                     250                                     255

Ile Ser Val Arg Asn Lys Ile His Asp Gly Glu Lys Met Glu Gly Ser
    260                                     265                                     270

Tyr Lys Val Pro Val Asn Pro Val Lys Pro Gly Asp Phe Asn Tyr Lys
    275                                     280                                     285

Gly Glu Met Lys Ile Ile Glu Ser Met Pro Ile Arg Ser Val Ile Thr
    290                                     295                                     300

Asn Ile Lys Asn Gly Ser Glu Ile Lys Ala Asn Lys Lys Phe Glu Val
    305                                     310                                     315                                     320

Arg Gly Lys Ala Trp Ala Gly Glu Leu Glu Val Ser Glu Val Tyr Val
    325                                     330                                     335

Ser Asn Asp Tyr Gly Val Thr Trp Thr Lys Ala Lys Val Glu Lys Pro
    340                                     345                                     350

Leu Asn Arg Leu Ala Trp Gln Lys Trp Ser Ala Gln Ile Ser Ile Pro
    355                                     360                                     365

Thr Lys Gly Tyr Tyr Glu Ile Trp Ala Arg Ala Ile Asp Ser Gln Gly
    370                                     375                                     380

Asn Ser Gln Pro Met Val Leu Ala Gln Trp Asn Pro Gly Gly Tyr Ile
    385                                     390                                     395                                     400

Asn Asn Ala Cys His Arg Val Asn Val Tyr Gly Val
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<210> 3
<211> 331
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:3 - Cj0029)

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<400> 3

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Met Lys Lys Ala Lys Ser Arg Ile Ala Ile Leu Gly Thr Gly Gly Thr
1      5      10      15
Ile Ala Gly Phe Ile Asp Ser Thr Ile Ala Thr Thr Gly Tyr Ala Ala
20      25      30
Gly Ala Ile Asp Ile Asp Val Leu Ile Lys Ala Val Pro Gln Ile Arg
35      40      45
Asp Leu Ala Asp Ile Ser Trp Glu Gln Ile Ala Asn Ile Asp Ser Ser
50      55      60
Asn Met Cys Asp Glu Ile Trp Leu Arg Leu Ala Lys Lys Ile Ala Lys
65      70      75      80
Leu Phe Ala Glu Gly Ile Asp Gly Val Val Ile Thr His Gly Thr Asp
85      90      95
Thr Met Glu Glu Thr Ala Tyr Phe Leu Asn Leu Thr Ile Lys Ser Asp
100     105     110
Lys Pro Val Val Leu Val Gly Ala Met Arg Pro Ser Thr Ala Ile Ser
115     120     125
Ala Asp Gly Pro Lys Asn Leu Tyr Asn Ala Val Ala Leu Val Val Asn
130     135     140
Lys Glu Ala Lys Asn Lys Gly Val Met Val Ala Ile Asn Asp Lys Ile
145     150     155     160
Leu Ser Ala Arg Gly Val Val Lys Thr His Ser Leu Asn Val Asp Ala
165     170     175
Phe Ser Ser Pro Asp Phe Gly Asp Leu Gly Tyr Ile Val Asp Gly Lys
180     185     190
Val Phe Phe Tyr Asn Asn Val Ile Lys Ala His Thr Lys Asn Ala Pro
195     200     205
Phe Asp Val Ser Lys Leu Thr Ser Leu Pro Lys Val Asp Ile Leu Tyr
210     215     220
Ser Tyr Ser Asn Asp Gly Ser Gly Val Ala Ala Lys Ala Leu Phe Glu
225     230     235     240
His Gly Thr Lys Gly Ile Val Val Ala Gly Ser Gly Ala Gly Ser Ile
245     250     255

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His Lys Asn Gln Lys Asp Val Leu Lys Glu Leu Leu Lys Lys Gly Leu
260 265 270

Lys Val Val Val Ser Ser Arg Val Val Ala Gly Cys Val Ala Val Ser
275 280 285

Asp Ser Asp Glu Lys Leu Gly Phe Ile Ser Ala Glu Asp Leu Asn Pro
290 295 300

Gln Lys Ala Arg Val Leu Leu Met Leu Ala Leu Thr Lys Thr Ser Asp
305 310 315 320

Pro Lys Lys Ile Gln Glu Tyr Phe Leu Lys Tyr
325 330

<210> 4
<211> 347
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:4 - Cj0037)
<400> 4

Met Lys Lys His Ile Leu Leu Leu Gly Leu Cys Leu Ser Leu Ser Leu
1 5 10 15

Ser Ala Lys Ser Val Ser Asp Tyr Lys Val Gly Glu Glu Leu Ser Asp
20 25 30

Lys Glu Gly Val Glu Tyr Phe Lys Glu Leu Ser Lys Arg Pro Val Gln
35 40 45

Glu Trp Pro Asn Lys Asn Leu Ser Ile Asn Asp Val Pro Lys Gly Lys
50 55 60

Gln Gly Asp Leu Ile Arg Tyr Gly Ile Glu Leu Leu Ser Lys Thr Glu
65 70 75 80

Ser Thr Leu Gly Pro Tyr Ser Lys Leu Lys Lys Thr Ser Asn Glu Val
85 90 95

Asn Cys Ile Ser Cys His Met Asp Asn Asp Gly Asn Gly Leu Pro Gly
100 105 110

Thr Lys Lys Tyr Val Ile Pro Phe Leu Asn Ile Leu Asn Asn Tyr Pro
115 120 125

Arg Leu Asp Ile Glu Thr Met Lys Ile Ile Ser Val Glu Asp Arg Ile
130 135 140

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Arg Gly Met Gly Gly Thr Asp Ser His Arg Phe Pro Asn Asp Ser Lys
145 150 155 160

Glu Met Lys Ala Ile Leu Ala Tyr Phe Lys Trp Leu Lys Glu Ala Tyr
165 170 175

Gly Ile Lys Asp Gly Val Lys Leu Glu Gly Asp Phe Phe Ala Lys Met
180 185 190

Asn Phe Pro Asn Arg Pro Ala Asp Pro Val Arg Gly Lys Lys Leu Phe
195 200 205

Glu Glu Asn Cys Val Ala Cys His Gly Glu Arg Gly Leu Gly Val Lys
210 215 220

Asn Asp Asn Tyr Glu Gln Gly Ser Gly His Leu Tyr Pro Ser Leu Leu
225 230 235 240

Ile Tyr Pro Asp Gly Gly His Met Ala Met Ile Pro Phe Leu Ala Arg
245 250 255

Phe Leu Lys Ser Ala Met Pro Phe Gly Ala Ser Ala Asp Asn Pro Ile
260 265 270

Leu Ser Asp Glu Asp Ala Leu Asp Ile Ala Ala Tyr Val Asn Thr Gly
275 280 285

Phe Val Arg Met Pro Ile Thr Thr Thr Glu Asn Arg Ala Gly Leu Asp
290 295 300

Thr Ala Tyr Ser Lys Ser Pro Ser Leu Lys Pro Glu Tyr Phe Ala Ser
305 310 315 320

Pro Gln Gln Asn Leu Asp Pro Lys Glu Tyr Ile Lys Val Lys Tyr Gly
325 330 335

Pro Trp Lys Asn Pro Asn His Phe Pro Gly Glu
340 345

<210> 5
<211> 400
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:5 - Cj0093)
<400> 5

Met Lys Ile Ile Lys Ile Leu Phe Leu Gly Leu Phe Leu Ser Leu Ser
1 5 10 15

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Leu Asn Ala Lys Val Ile Thr Thr Thr Ser Thr Lys Ser Ser Thr Gly
 20 25 30
 Glu Gly Thr Gly Leu Thr Arg Glu Asp Ala Ile Asn Asn Ala Ile Ile
 35 40 45
 Glu Ala Ile Gly Lys Met Ser Gly Val Ser Ile Asn Ser Leu Lys Lys
 50 55 60
 Ser Asn Thr Ser Val Ser Thr Asp Asn Ser Gly Ser Asn Ile Gln Asp
 65 70 75 80
 Asn Tyr Ser Glu Gln Ile Ser Lys Ala Thr Lys Gly Arg Ala Asp Thr
 85 90 95
 Tyr Glu Ile Asn Ser Val Glu Gln Asp Ala Asn Gly Lys Tyr Thr Ala
 100 105 110
 Asn Val Thr Ile Phe Lys Thr Thr Thr Thr Lys Lys Tyr Gln Ala Pro
 115 120 125
 Gly Leu Ser Ala Asp Asn Arg Arg Ser Ile Thr Val Phe Asp Ser Thr
 130 135 140
 Pro Asp Ala Ala Lys Arg Gly Ile Gly Ser Ala Leu Gln Gln Lys Ile
 145 150 155 160
 Ile Ser Asp Leu Leu Gln Ser Arg Lys Phe Asn Val Leu Asp Arg Asp
 165 170 175
 Ser Ser Gly Tyr Tyr Glu Met Glu Lys Ala Leu Ile Lys Ser Gly Asp
 180 185 190
 Ala Ala Ser Asp Glu Val Tyr Lys Leu Lys Asn Met Leu Ala Thr Asp
 195 200 205
 Tyr Ile Leu Leu Phe Ser Ile Ser Gly Leu Glu Gly Lys Gln Lys Thr
 210 215 220
 Ser Asn Leu Thr Gly Lys Ser Lys Thr Glu Ile Glu Val Ile Val Asp
 225 230 235 240
 Tyr Arg Val Leu Leu Phe Ala Thr Arg Gln Ile Lys Phe Ser Asn Thr
 245 250 255
 Leu Ser Met Lys Val Asn Leu Lys Asp Asn Ser Leu Ser Ala Asn Glu
 260 265 270

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Thr Ala Leu Lys Gln Ile Ala Asn Arg Ile Ala Gly Asp Ile Leu Asn
275 280 285

Ala Ile Tyr Pro Leu Lys Val Ala Ser Val Glu Asn Asn Glu Val Ile
290 295 300

Phe Ser Gln Ser Leu Asn Gln Gly Asp Val Tyr Glu Cys Phe Ala Leu
305 310 315 320

Gly Lys Val Ile Lys Asp Thr Tyr Thr Lys Glu Asn Thr Gly Arg Val
325 330 335

Glu Ser Lys Thr Gly Ser Ile Glu Ile Thr Arg Thr Ser Pro Lys Phe
340 345 350

Ser Tyr Ala Lys Ile Thr Glu Gly Ser Val Lys Val Gly Asp Ile Cys
355 360 365

Arg Pro Leu Ser Asn Thr Gly Ser Gly Asn Gly Tyr Thr Ile Gly Arg
370 375 380

Asp Ala Asn Tyr Gln Thr Gln Glu Gly Gly Gly Val Asn Leu Gly Phe
385 390 395 400

<210> 6
<211> 465
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:6 - Cj0107)

<400> 6

Met Gln Gly Phe Ile Ser Gln Val Leu Gly Pro Val Val Asp Val Asp
1 5 10 15

Phe Asn Asp Tyr Leu Pro Gln Ile Asn Glu Ala Ile Val Val Asn Phe
20 25 30

Glu Ser Glu Gly Lys Lys His Lys Leu Val Leu Glu Val Ala Ala His
35 40 45

Leu Gly Asp Asn Arg Val Arg Thr Ile Ala Met Asp Met Thr Asp Gly
50 55 60

Leu Val Arg Gly Leu Lys Ala Glu Ala Leu Gly Ala Pro Ile Ser Val
65 70 75 80

Pro Val Gly Glu Lys Val Leu Gly Arg Ile Phe Asn Val Thr Gly Asp
85 90 95

Leu Ile Asp Glu Gly Glu Glu Ile Ser Phe Asp Lys Lys Trp Ala Ile

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100                               105                               110
His Arg Asp Pro Pro Ala Phe Glu Asp Gln Ser Thr Lys Ser Glu Ile
115                               120                               125

Phe Glu Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro Tyr Ala Lys
130                               135                               140

Gly Gly Lys Val Gly Leu Phe Gly Gly Ala Gly Val Gly Lys Thr Val
145                               150                               155

Ile Ile Met Glu Leu Ile His Asn Val Ala Phe Lys His Ser Gly Tyr
165                               170                               175

Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly Asn Asp Leu
180                               185                               190

Tyr Asn Glu Met Lys Glu Ser Asn Val Leu Asp Lys Val Ala Leu Cys
195                               200                               205

Tyr Gly Gln Met Asn Glu Pro Pro Gly Ala Arg Asn Arg Ile Ala Leu
210                               215                               220

Thr Gly Leu Thr Met Ala Glu Tyr Phe Arg Asp Glu Met Gly Leu Asp
225                               230                               235

Val Leu Met Phe Ile Asp Asn Ile Phe Arg Phe Ser Gln Ser Gly Ser
245                               250                               255

Glu Met Ser Ala Leu Leu Gly Arg Ile Pro Ser Ala Val Gly Tyr Gln
260                               265                               270

Pro Thr Leu Ala Ser Glu Met Gly Lys Phe Gln Glu Arg Ile Thr Ser
275                               280                               285

Thr Lys Lys Gly Ser Ile Thr Ser Val Gln Ala Val Tyr Val Pro Ala
290                               295                               300

Asp Asp Leu Thr Asp Pro Ala Pro Ala Thr Val Phe Ala His Leu Asp
305                               310                               315                               320

Ala Thr Thr Val Leu Asn Arg Ala Ile Ala Glu Lys Gly Ile Tyr Pro
325                               330                               335

Ala Val Asp Pro Leu Asp Ser Thr Ser Arg Met Leu Asp Pro Asn Ile
340                               345                               350

Ile Gly Glu Glu His Tyr Lys Val Ala Arg Gly Val Gln Ser Val Leu

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355

360

365

Gln Lys Tyr Lys Asp Leu Gln Asp Ile Ile Ala Ile Leu Gly Met Asp
370 375 380

Glu Leu Ser Glu Glu Asp Lys Leu Val Val Glu Arg Ala Arg Lys Ile
385 390 395 400

Glu Lys Phe Leu Ser Gln Pro Phe Phe Val Ala Glu Val Phe Thr Gly
405 410 415

Ser Pro Gly Lys Tyr Ile Ser Leu Glu Asp Thr Ile Ala Gly Phe Lys
420 425 430

Gly Ile Leu Glu Gly Lys Tyr Asp His Leu Pro Glu Asn Ala Phe Tyr
435 440 445

Met Val Gly Asn Ile Asp Glu Ala Ile Ala Lys Ala Asp Lys Leu Lys
450 455 460

Gly
465

<210> 7
<211> 402
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:7 - Cj0112)

<400> 7

Met Lys Lys Ile Val Ala Ile Phe Leu Val Phe Leu Gly Ser Leu Trp
1 5 10 15

Ala Glu Asp Pro Val Ile Asp Val Val Asn Ser Gly Val Val Leu Pro
20 25 30

Lys Ile Ile Val Lys Asp Asn Ser Asn Leu Ser Asp Glu Asn Leu Lys
35 40 45

Lys Ser Phe Tyr Asn Ile Ile Val Asn Asp Leu Lys Val Ser Ser Asn
50 55 60

Phe Glu Val Val Ala Asn Ala Thr Glu Thr Ser Asn Tyr Ile Phe Glu
65 70 75 80

Tyr Thr Leu Asn Lys Asn Gly Asn Thr Leu Ser Leu Asn Val Lys Ile
85 90 95

Lys Ala Gly Gly Ser Asp Lys Ser Glu Gln Thr Tyr Thr Leu Asn Gly
100 105 110

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Leu Glu Gln Tyr Pro Phe Leu Ala His Lys Ser Val Lys Ala Ser Val
 115 120 125
 Asn Ala Leu Gly Leu Ala Pro Val Asp Trp Met Asp His Lys Ile Leu
 130 135 140
 Ile Ala Arg Asn Ser Ser Ser Lys Lys Ser Gln Ile Ile Met Ala Asp
 145 150 155 160
 Tyr Thr Leu Thr Tyr Gln Lys Val Ile Val Asp Gly Gly Leu Asn Leu
 165 170 175
 Phe Pro Lys Trp Gly Asn Lys Glu Gln Thr Leu Phe Tyr Tyr Thr Ala
 180 185 190
 Tyr Asp His Asp Lys Pro Thr Leu Tyr Arg Tyr Asp Leu Asn Thr Asn
 195 200 205
 Lys Ala Ser Lys Ile Leu Ser Ser Gly Gly Met Val Val Ala Ser Asp
 210 215 220
 Val Asn Val Asp Gly Ser Lys Leu Leu Val Thr Met Ala Pro Lys Asp
 225 230 235 240
 Gln Pro Asp Val Tyr Leu Tyr Asp Leu Asn Thr Lys Asn Leu Thr Gln
 245 250 255
 Leu Thr Asn Tyr Ser Gly Ile Asp Val Asn Gly Asn Phe Ile Gly Ser
 260 265 270
 Asp Asp Ser Lys Val Val Phe Val Ser Asp Arg Leu Gly Tyr Pro Asn
 275 280 285
 Ile Phe Met Gln Asp Leu Asn Ser Asn Ser Ala Glu Gln Val Val Phe
 290 295 300
 His Gly Arg Asn Asn Ser Ala Val Ser Thr Tyr Lys Asp Phe Leu Val
 305 310 315 320
 Tyr Ser Ser Arg Glu Pro Asn Gln Ala Gly Val Phe Asn Ile Tyr Leu
 325 330 335
 Met Ser Ile Asn Ser Asp Tyr Ile Arg Gln Leu Thr Ala Asn Gly Lys
 340 345 350
 Asn Leu Phe Pro Arg Phe Ser Ser Asp Gly Gly Ser Ile Val Phe Ile
 355 360 365

Sequence_Listing_0088562_015US0.TXT

Lys Tyr Leu Gly Ala Gln Ser Ala Leu Gly Val Ile Arg Val Asn Ala
370 375 380

Asn Lys Thr Phe Tyr Phe Pro Leu Arg Val Gly Lys Ile Gln Ser Ile
385 390 395 400

Asp Trp

<210> 8
<211> 296
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:8 - Cj0143)
<400> 8

Met Lys Lys Ile Ile Leu Phe Ile Leu Ser Leu Gly Ile Phe Tyr Thr
1 5 10 15

Phe Thr Gln Ala Lys Asn Leu Glu Gln Glu Gln Asn Thr Ser Ser Asn
20 25 30

Leu Val Ser Val Ser Ile Ala Pro Gln Ala Phe Phe Val Lys Lys Ile
35 40 45

Ala Ala Asn Thr Leu Asp Val Asn Val Ile Leu Pro Pro Asn Ser Asn
50 55 60

Glu His Asn Phe Glu Phe Lys Pro Ser Thr Met Lys Lys Leu Glu Lys
65 70 75 80

Ser Asp Ile Tyr Phe Thr Ile Gly Leu Glu Phe Glu Lys Val Phe Thr
85 90 95

Asp Lys Phe Lys Gln Asn Phe Pro Lys Leu Gln Val Ile Asn Met Gln
100 105 110

Lys Asn Ile Ala Leu Ile Gln Thr His Asp Thr His Glu His Ser His
115 120 125

Glu His Glu His His Glu His Gly His Phe Asp Pro His Thr Trp Leu
130 135 140

Asp Pro Ile Leu Val Gln Thr Met Ala Leu Asn Ile Tyr Asp Thr Leu
145 150 155 160

Ile Gln Lys Tyr Pro Gln Asn Glu Asn Leu Tyr Lys Glu Asn Leu Asp
165 170 175

Sequence_Listing_0088562_015US0.TXT

Lys Phe Leu Ala Glu Leu Asp Ser Leu Asn Leu Gln Ile Ala Ser Lys
180 185 190

Leu Glu Lys Leu Lys Asn Arg Glu Phe Val Val Tyr His Pro Ser Trp
195 200 205

Thr Tyr Phe Ala Lys Arg Tyr Asn Leu Thr Gln Ile Pro Val Glu Ile
210 215 220

Leu Gly Lys Glu Pro Lys Ser Lys Asp Leu Gln Lys Leu Ile Thr Leu
225 230 235 240

Met Lys Asp Lys Asn Leu Lys Val Ile Phe Val Gln Asn Gly Phe Pro
245 250 255

Glu Asn Ala Ala Lys Thr Leu Ala Lys Glu Cys Asp Ala Lys Ile Tyr
260 265 270

Lys Ile Asp His Leu Ser Tyr Asp Trp Glu Asn Glu Leu Leu Lys Thr
275 280 285

Ala Asp Ala Phe Ser His Asn Leu
290 295

<210> 9
<211> 220
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:9 - Cj0169)

<400> 9

Met Phe Glu Leu Arg Lys Leu Pro Tyr Asp Thr Asn Ala Phe Gly Asp
1 5 10 15

Phe Leu Ser Ala Glu Thr Phe Ser Tyr His His Gly Lys His His Asn
20 25 30

Thr Tyr Val Thr Asn Leu Asn Asn Leu Ile Lys Asp Thr Glu Phe Ala
35 40 45

Gly Lys Asp Leu Val Ser Ile Ile Lys Thr Ser Asn Gly Gly Val Phe
50 55 60

Asn Asn Ala Ala Gln Val Tyr Asn His Asp Phe Tyr Phe Asp Cys Ile
65 70 75 80

Lys Pro Ser Thr Gly Cys Gly Cys Gly Gly Ser Cys Gln Ser Ile Asp
85 90 95

Sequence_Listing_0088562_015US0.TXT

Ala Asn Leu Gln Ala Ala Leu Glu Lys Glu Phe Gly Ser Leu Glu Asn
100 105 110

Phe Lys Ala Glu Phe Ile Lys Gly Ala Thr Gly Val Phe Gly Ser Gly
115 120 125

Trp Phe Trp Leu Val Tyr Asn Thr Lys Asn Gln Lys Leu Glu Phe Val
130 135 140

Gly Thr Ser Asn Ala Ala Thr Pro Ile Thr Glu Asp Lys Val Pro Leu
145 150 155 160

Leu Val Val Asp Val Trp Glu His Ala Tyr Tyr Val Asp His Arg Asn
165 170 175

Ala Arg Pro Ala Tyr Leu Glu Lys Phe Tyr Ala His Ile Asn Trp Glu
180 185 190

Phe Val Ala Lys Ala Tyr Glu Trp Ala Leu Lys Glu Gly Met Gly Ser
195 200 205

Val Ser Phe Tyr Ala Asn Glu Leu His Pro Val Lys
210 215 220

<210> 10

<211> 444

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:10 - Cj0193c)

<400> 10

Met Glu Val Lys Ala Lys Gln Leu Asp Ser Val Asn Ala Thr Ala Ser
1 5 10 15

Val Lys Ile Pro Ser Gly Met Ile Lys Ser Glu Val Glu Asn Leu Ala
20 25 30

Lys Lys Ala Ser Lys Ser Val Lys Met Asp Gly Phe Arg Pro Gly Lys
35 40 45

Val Pro Val Ser Ala Val Leu Lys Arg Tyr Glu Arg Glu Leu Thr Gln
50 55 60

Asp Ala Glu Gln Asn Leu Phe Lys Ser Ala Val Asn Ser Ala Leu Gln
65 70 75 80

Glu Leu Lys Lys Glu Asn Lys Glu Leu Val Gly Glu Pro Tyr Phe Glu
85 90 95

Lys Phe Asp Arg Lys Asp Gly Glu Ile Ile Ala Glu Leu Ile Leu Ser

Sequence_Listing_0088562_015US0.TXT

100																			
Phe	Lys	Pro	Glu	Ile	Lys	Leu	Glu	Gly	Tyr	Glu	Lys	Leu	Ile	Pro	Glu				
		115					120					125							
Tyr	Gln	Thr	Pro	Lys	Val	Ser	Lys	Lys	Glu	Ile	Asp	Glu	Lys	Lys	Asp				
	130					135					140								
Glu	Leu	Leu	Lys	Arg	Phe	Ala	Thr	Pro	Glu	Ala	Ile	Lys	Thr	Lys	Arg				
145					150					155					160				
Ala	Leu	Lys	Glu	Gly	Asp	Phe	Ala	Lys	Phe	Asp	Phe	Glu	Gly	Phe	Val				
				165					170					175					
Asp	Asp	Lys	Ala	Phe	Glu	Gly	Gly	Lys	Ala	Glu	Asn	Tyr	Val	Leu	Glu				
			180					185					190						
Ile	Gly	Ser	Lys	Gln	Phe	Ile	Pro	Gly	Phe	Glu	Asp	Gly	Met	Val	Gly				
		195					200					205							
Met	Lys	Ile	Gly	Glu	Glu	Lys	Asp	Ile	Lys	Val	Thr	Phe	Pro	Lys	Glu				
	210					215					220								
Tyr	Gly	Ala	Ala	His	Leu	Ala	Gly	Lys	Asp	Ala	Val	Phe	Lys	Val	Lys				
225					230					235					240				
Leu	His	Glu	Ile	Gln	Glu	Leu	Lys	Ile	Pro	Glu	Leu	Asp	Asp	Glu	Met				
				245					250					255					
Leu	Lys	Lys	Leu	Leu	Pro	Gly	Glu	Glu	Lys	Ala	Ser	Val	Glu	Val	Leu				
			260					265					270						
Asp	Glu	Lys	Leu	Lys	Glu	Gln	Ile	Lys	Asn	Glu	Lys	Leu	Phe	Lys	Leu				
		275					280					285							
Val	Asn	Asp	Glu	Leu	Lys	Gly	Lys	Phe	Ala	Asp	Ala	Leu	Ile	Glu	Lys				
	290					295					300								
Tyr	Asn	Phe	Asp	Leu	Pro	Lys	Gly	Ile	Val	Glu	Gln	Glu	Thr	Asp	Met				
305					310					315					320				
Gln	Met	Arg	Ala	Ala	Phe	Asn	Thr	Phe	Ser	Glu	Lys	Glu	Ile	Glu	Glu				
				325					330					335					
Leu	Lys	Ala	Ser	Lys	Glu	Lys	Tyr	Gln	Glu	Lys	Arg	Asp	Ser	Phe	Lys				
			340					345					350						
Glu	Glu	Ala	Gln	Lys	Ser	Val	Lys	Leu	Thr	Phe	Ile	Ile	Asp	Glu	Leu				

Sequence_Listing_0088562_015US0.TXT

355

360

365

Ala Lys Leu Arg Lys Ile Glu Val Asn Asp Gln Glu Leu Ile Gln Ala
370 375 380

Ile Tyr Phe Glu Ala Tyr Arg Tyr Gly Met Asn Pro Lys Glu His Leu
385 390 395 400

Glu Asn Tyr Lys Lys Gln Gly Ala Leu Pro Ala Val Lys Met Ala Leu
405 410 415

Ile Glu Glu Lys Leu Phe Asn Asp Ile Phe Ile Pro Lys Thr Glu Lys
420 425 430

Ser Glu Lys Val Ser Lys Lys Glu Lys Glu Asp Lys
435 440

<210> 11

<211> 318

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:11 - Cj0285c)

<400> 11

Met Phe Asp Glu Asn Ile Val Lys Thr Gly Ser Asn Glu Met Glu Leu
1 5 10 15

Val Asp Phe Arg Ile Phe Lys Gln Gly His Asp Lys Val Tyr Glu Gly
20 25 30

Ile Tyr Gly Val Asn Val Ser Lys Val Arg Glu Ile Ile Lys Ile Pro
35 40 45

Ser Leu Thr Glu Leu Pro Gly Val Pro Asp Tyr Ile Glu Gly Ile Phe
50 55 60

Asp Leu Arg Gly Val Val Ile Pro Val Val Asn Leu Ala Lys Trp Met
65 70 75 80

Gln Ile Thr Glu Pro Glu Ser Thr Met Leu Lys Pro Arg Val Ile Ile
85 90 95

Thr Glu Phe Ser Asn Ile Leu Ile Gly Phe Ile Val His Glu Ala Lys
100 105 110

Arg Ile Arg Arg Ile Asn Trp Lys Asp Ile Glu Pro Ala Thr Phe Ser
115 120 125

Thr Gly Ser Gly Ala Leu Asp Lys Gly Lys Ile Thr Gly Val Thr Arg
130 135 140

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Ile Glu Asn Asp Glu Val Leu Leu Ile Leu Asp Leu Glu Ser Val Val
145 150 155 160

Glu Asp Leu Gly Ile Tyr Ala Pro Lys Thr Asp Ile Asp Phe Gly Lys
165 170 175

Ile Glu Lys Phe Thr Gly Thr Ala Leu Ile Leu Asp Asp Ser Met Thr
180 185 190

Ala Arg Lys Arg Val Lys Glu Met Met Gln Gln Met Gly Phe Gln Val
195 200 205

Val Glu Ala Lys Asp Gly Val Glu Gly Ile Asn Lys Leu Glu Glu Leu
210 215 220

Ser Gln Ile Tyr Gly Glu Ser Leu Asn Asp Thr Leu Lys Ile Ile Val
225 230 235 240

Ser Asp Val Glu Met Pro Gln Met Asp Gly Phe His Phe Ala Ala Arg
245 250 255

Ile Lys Glu Asp Pro Arg Phe Lys Asp Ile Pro Ile Val Phe Asn Ser
260 265 270

Ser Leu Ser Asn Glu Phe Met Asn Glu Lys Gly Val Gln Glu Ala Gly
275 280 285

Gly Glu Gly Tyr Leu Val Lys Phe Asn Ala Ser Asp Phe Phe Asn Glu
290 295 300

Ile Ala Lys Val Ile Lys Lys His Gln Ser Gln Glu Gln Gly
305 310 315

<210> 12

<211> 341

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:12 - Cj0358)

<400> 12

Met Lys Val Lys Ser Leu Leu Ile Ala Ser Leu Val Ala Phe Ser Ser
1 5 10 15

Leu Asn Ala Ala Ser Leu Ile Asp Glu Ala Lys Asn Ser Gly Leu Val
20 25 30

Ala Leu Pro Lys Asp Gln Lys Gly Val Asp Glu Ile Leu Lys Gln Asn
35 40 45

Sequence_Listing_0088562_015US0.TXT

Gly Val Lys Ala Ser Glu Phe Thr Leu Glu Lys Ala Glu Leu Gly Lys
 50 55 60
 Lys Leu Tyr Phe Glu Pro Arg Leu Ser Lys Ser Gly Ile Ile Ser Cys
 65 70 75 80
 Asn Thr Cys His Asn Val Gly Leu Gly Gly Thr Asp Gly Ile Ser Thr
 85 90 95
 Ala Ile Gly His Lys Trp Thr Ala Asn Pro His His Leu Asn Ser Pro
 100 105 110
 Thr Val Tyr Asn Ala Val Leu Asn Asn Thr Gln Phe Trp Asp Gly Arg
 115 120 125
 Ala Gly Thr Leu Ala Asp Gln Ala Lys Gly Pro Ile Gln Ala Asp Pro
 130 135 140
 Glu Met Ala Thr Pro Ala Lys Leu Ala Val Glu Lys Ile Ser Ser Leu
 145 150 155 160
 Pro Glu Tyr Val Ser Glu Phe Lys Lys Ile Tyr Gly Lys Ser Gly Val
 165 170 175
 Asn Phe Asp Asn Ile Ala Asp Ala Ile Ala Asn Phe Glu Arg Thr Leu
 180 185 190
 Ile Thr Pro Ser Arg Phe Asp Lys Phe Leu Glu Gly Asp Glu Lys Ala
 195 200 205
 Leu Thr Lys Glu Glu Gln Lys Gly Leu Lys Leu Phe Ile Asp Lys Gly
 210 215 220
 Cys Val Ala Cys His Asn Gly Val Asn Leu Gly Gly Asn Met Gln Ala
 225 230 235 240
 Phe Glu Val Ala Gly Lys Tyr Lys Phe Ala Asn Leu Gly Asp Phe Lys
 245 250 255
 Gly Asp Ala Asn Gly Met Val Lys Thr Pro Thr Leu Arg Asn Val Ala
 260 265 270
 Glu Thr Ala Pro Tyr Phe His Asn Gly Ala Ile Trp Asn Leu Lys Asp
 275 280 285
 Ala Ile Lys Glu Met Gly Ser Val Gln Leu Gly Ile Lys Ile Ser Asp
 290 295 300

Sequence_Listing_0088562_015US0.TXT

Lys Glu Ala Lys Ser Ile Glu Thr Phe Leu Lys Ser Leu Thr Gly Thr
305 310 315 320

Lys Pro Ala Ile Val Tyr Pro Gln Leu Pro Ile Ser Thr Glu Lys Thr
325 330 335

Pro Lys Pro Glu Leu
340

<210> 13

<211> 365

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:13 - Cj0448c)

<400> 13

Met Phe Gly Ser Lys Ile Asn His Ser Asp Leu Gln Lys Leu Glu Glu
1 5 10 15

Glu Asn Lys Asn Leu Thr His Lys Ile Glu Lys Phe Gln Ser Glu Asn
20 25 30

Leu Glu Leu Lys Asn Lys Ile Thr Ser Leu Glu Gln Ala Ala Leu Glu
35 40 45

Ser Lys Leu Lys Thr Asp Leu Leu Asn Val Leu Leu Thr Gly Val Leu
50 55 60

Lys Asn Ile Thr Ile Ile Gln Gly Asp Met Leu Glu Asn Val Asn Lys
65 70 75 80

Ala Glu Val Ile Ser Ser Tyr Ser Lys Thr Ser Leu Ala Glu Met Asp
85 90 95

Glu Leu Asn His Ile Ala Asn Ser Ile Asn Ala Ser Leu Gly Asn Ile
100 105 110

Thr Glu Ser Ala Asn Lys Thr Arg Asp Val Ala Gly Thr Leu His Arg
115 120 125

Ser Val Asp Glu Ile Thr Asn Val Ile Asn Leu Ile Lys Asp Val Ser
130 135 140

Asp Gln Thr Asn Leu Leu Ala Leu Asn Ala Ala Ile Glu Ala Ala Arg
145 150 155 160

Ala Gly Glu His Gly Arg Gly Phe Ala Val Val Ala Asp Glu Val Arg
165 170 175

Sequence_Listing_0088562_015US0.TXT

Lys Leu Ala Glu Lys Thr Gln Lys Ala Thr Thr Glu Val Glu Met Asn
180 185 190

Ile Asn Leu Leu Lys Gln Asn Ala Asn Glu Met Tyr Thr Gln Ser Glu
195 200 205

Gln Val Glu Lys Ile Ser Ile Asp Ser Asn Ala His Ile Met Ser Phe
210 215 220

Ser Glu Lys Phe Thr His Leu Val Asn Glu Ala His Ser Thr Asn Ser
225 230 235 240

Asn Ala Val Gly Ile Ala Ser Glu Ala Phe Val Ser Leu Ala Lys Leu
245 250 255

Asp His Ile Ala Phe Lys Leu Asn Gly Tyr Lys Glu Ile Phe Ser Lys
260 265 270

Ser Gly Lys Gln Leu Ala Asp His Thr Ser Cys Arg Leu Gly Lys Trp
275 280 285

Leu Ala Ser Thr Gly Lys Glu Arg Phe Gly Gln Asn Lys Ser Phe Leu
290 295 300

Lys Ile Asn Glu Pro His Glu Lys Val His Glu Asn Met Asn Asn Ala
305 310 315 320

Ile Thr Ile Ala Asn Thr Glu Asp Ile Ser Lys Asp Ile Thr Gln His
325 330 335

Ser Ile Ile Asn Lys Cys Glu Val Ala Glu Asn Ala Ser Leu Asp Leu
340 345 350

Phe Asn Val Phe Lys Glu Met Leu Asp Glu Ser Asp His
355 360 365

<210> 14

<211> 71

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:14 - Cj0449c)

<400> 14

Met Leu His Glu Tyr Arg Glu Leu Met Ser Glu Leu Lys Gly Lys Asp
1 5 10 15

Ala His Phe Asp Lys Leu Phe Asp Arg His Asn Glu Leu Asp Asp Met
20 25 30

Ile Lys Asp Ala Glu Glu Gly Arg Thr Ser Leu Ser Ser Met Glu Ile

35

40

45

Ser Thr Leu Lys Lys Glu Lys Leu His Val Lys Asp Glu Leu Ser Gln
 50 55 60

Tyr Leu Ala Asn Tyr Lys Lys
 65 70

<210> 15

<211> 444

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:15 - Cj0511)

<400> 15

Met Met Glu Leu Ile Leu Lys Thr Lys Arg Phe Phe Ala Gly Leu Ala
 1 5 10 15

Gly Phe Ala Thr Thr Phe Ile Leu Cys Leu Phe Leu Thr Ser His Leu
 20 25 30

Gln Ala Lys Val Asp Gln Lys Glu Glu Gln Val Gln Lys Arg Leu Glu
 35 40 45

Ala Leu Asp Lys Leu Thr Lys Thr Leu Ala Ile Val Glu Gln Tyr Tyr
 50 55 60

Val Asp Asp Gln Asn Ile Ser Asp Leu Val Asp Lys Ser Leu Ser Gly
 65 70 75 80

Leu Leu Ser Asn Leu Asp Ala His Ser Ser Phe Leu Asn Glu Lys Asp
 85 90 95

Phe Asn Asp Met Lys Ile Gln Thr Asn Gly Glu Phe Gly Gly Leu Gly
 100 105 110

Ile Thr Val Gly Met Lys Asp Gly Ala Leu Thr Val Val Ser Pro Ile
 115 120 125

Glu Gly Thr Pro Ala Asp Lys Ala Gly Ile Lys Ser Gly Asp Ile Ile
 130 135 140

Leu Lys Ile Asn Asp Glu Ala Thr Leu Gly Ile Asn Leu Asn Asp Ala
 145 150 155 160

Val Asp Lys Met Arg Gly Lys Pro Lys Thr Gln Ile Thr Leu Thr Ile
 165 170 175

Phe Arg Lys Gly Ala Thr Lys Pro Phe Asp Val Thr Leu Thr Arg Glu
 180 185 190

Sequence_Listing_0088562_015US0.TXT

Ile Ile Lys Ile Glu Ser Val Tyr Ala Lys Met Ile Glu Asn Glu Asn
195 200 205

Ile Leu Tyr Leu Arg Val Thr Asn Phe Asp Lys Asn Val Val Asp Val
210 215 220

Ala Ser Lys Glu Leu Lys Lys Tyr Pro Asn Val Lys Gly Val Ile Leu
225 230 235 240

Asp Leu Arg Asn Asn Pro Gly Gly Leu Leu Asn Gln Ala Ile Gly Leu
245 250 255

Val Asn Leu Phe Val Asp Lys Gly Val Ile Val Ser Gln Lys Gly Arg
260 265 270

Ile Ala Ser Glu Asn Gln Glu Tyr Lys Ala Asp Pro Lys Asn Lys Ile
275 280 285

Ser Asn Ala Ser Leu Val Val Leu Val Asn Gly Gly Ser Ala Ser Ala
290 295 300

Ser Glu Ile Val Ser Gly Ala Leu Gln Asp Leu Lys Arg Gly Val Ile
305 310 315 320

Val Gly Glu Asn Thr Phe Gly Lys Gly Ser Val Gln Gln Ile Ile Pro
325 330 335

Ile Asn Lys Thr Glu Ala Leu Arg Leu Thr Ile Ala Arg Tyr Tyr Leu
340 345 350

Pro Ser Gly Arg Thr Ile Gln Ala Val Gly Val Lys Pro Asp Ile Glu
355 360 365

Val Phe Pro Gly Lys Val Asn Thr Gln Glu Asp Gly Phe Ser Ile Lys
370 375 380

Glu Ser Asp Leu Lys Gln His Leu Glu Ser Glu Leu Glu Lys Ile Asp
385 390 395 400

Lys Asn Lys Lys Glu Asp Lys Gln Glu Asn Lys Asp Asn Lys Asn Leu
405 410 415

Ile Ser Gln Lys Gln Ile Asn Asp Asp Ala Gln Leu Lys Ser Ala Ile
420 425 430

Asp Thr Ile Lys Ile Leu Asn Ile Lys Gln Gly Gln
435 440

Sequence_Listing_0088562_015US0.TXT

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<210> 16
<211> 311
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:16 - Cj0559)

<400> 16
Met Lys Lys Ile Asp Leu Ile Val Val Gly Ala Gly Pro Thr Gly Ile
1      5      10      15
Gly Cys Ala Val Glu Ala Lys Leu Lys Asn Lys Glu Val Leu Ile Leu
20      25      30
Glu Lys Ser Asn Asn Ile Cys Gln Thr Leu Met Gln Phe Tyr Lys Asp
35      40      45
Gly Lys Arg Val Asp Lys Ala Tyr Lys Gly Cys Glu Gly Thr Asn His
50      55      60
Gly His Val Pro Phe Glu Asp Gly Thr Lys Glu Ser Thr Ile Glu Thr
65      70      75      80
Phe Gln Asn Ala Leu Lys Glu His Asn Ile Glu Val Glu Phe Gly Ser
85      90      95
Glu Val Glu Ser Val Lys Asn Glu Asn Gly Val Phe Leu Val Ser Thr
100     105     110
Ala Lys Gly Val Tyr Glu Cys Lys Asn Ile Ile Val Ala Ile Gly Arg
115     120     125
Met Gly Lys Pro Asn Lys Pro Asp Tyr Lys Leu Pro Met Thr Leu Thr
130     135     140
Lys Ile Ile Asn Phe Asn Ala Asn Ser Val Leu Gly Asn Glu Lys Ile
145     150     155     160
Leu Val Val Gly Gly Gly Asn Ser Ala Ala Glu Tyr Ala Val Asp Leu
165     170     175
Ala Asn Ser Asn Gln Val Ser Leu Cys Tyr Arg Lys Lys Glu Phe Thr
180     185     190
Arg Leu Asn Asp Ile Asn Leu Lys Asp Ile His Glu Ala Gly Asn Ser
195     200     205
Gly Lys Val Glu Leu Lys Leu Gly Ile Asp Ile Asn Glu Val Glu Asp
210     215     220

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Sequence_Listing_0088562_015US0.TXT

Asp Asn Gly Lys Ala Lys Val Asn Phe Thr Asp Gly Thr Ser Asp Ile
225 230 235 240

Tyr Asp Arg Ile Ile Tyr Ala Ile Gly Gly Ser Thr Pro Leu Asp Phe
245 250 255

Leu Gln Lys Cys Gly Ile Asn Val Asp Asp Lys Gly Val Pro Leu Met
260 265 270

Asp Glu Asn Lys Gln Ser Asn Val Lys Gly Ile Phe Val Ala Gly Asp
275 280 285

Ile Ala Thr Lys Asn Gly Ala Ser Ile Val Thr Gly Leu Asn Asp Ala
290 295 300

Val Lys Ile Leu Ser Val Leu
305 310

<210> 17
<211> 331
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:17 - Cj0613)
<400> 17

Met Lys Lys Ile Leu Ser Leu Ser Val Thr Ser Leu Ala Leu Cys Gly
1 5 10 15

Ala Leu Asn Ala Val Asp Leu Lys Ile Ala Gly Ser Ser Thr Val Tyr
20 25 30

Pro Phe Thr Ser Phe Val Ala Glu Glu Tyr Ala Ser Ile Lys Asn Thr
35 40 45

Lys Thr Pro Ile Val Glu Ser Leu Gly Thr Gly Gly Gly Phe Lys Val
50 55 60

Phe Cys Glu Gly Thr Thr Asp Ile Ser Asn Ala Ser Arg Pro Met Lys
65 70 75 80

Leu Ser Glu Phe Glu Thr Cys Lys Lys Ala Gly Val Thr Asp Ile Val
85 90 95

Gly Met Met Ile Gly Tyr Asp Gly Ile Val Leu Ala Gln Asn Lys Thr
100 105 110

Asn Ala Pro Leu Asn Ile Thr Lys Lys Glu Leu Phe Leu Ala Leu Ala
115 120 125

Sequence_Listing_0088562_015US0.TXT

Lys Glu Ile Pro Gln Asn Gly Lys Leu Ile Pro Asn Pro Tyr Thr Asn
130 135 140

Trp Asn Gln Ile Asn Lys Asn Leu Pro Asn Arg Lys Ile Ser Val Tyr
145 150 155 160

Gly Pro Pro Ser Ser Ser Gly Thr Arg Asp Thr Ile Glu Glu Leu Val
165 170 175

Met Ser Asp Val Ser Lys Lys Ile Pro Glu Tyr Lys Gly Glu Tyr Lys
180 185 190

Thr Ile Arg Gln Asp Gly Ala Tyr Ile Pro Ser Gly Glu Asn Asp Asn
195 200 205

Leu Ile Val Ser Lys Leu Thr Ile Asp Lys Asp Ala Phe Gly Ile Phe
210 215 220

Gly Tyr Ser Phe Leu Val Ser Asn Ser Asp Lys Ile Asn Ala Ala Asn
225 230 235 240

Ile Asp Gly Val Thr Pro Ser Glu Glu Ser Ile Ala Asp Glu Lys Tyr
245 250 255

Glu Leu Ala Arg Ser Leu Phe Ile Tyr Ile Asn Ala Lys Lys Asn Pro
260 265 270

Lys Glu Ala Phe Asp Phe Ala Lys Ile Tyr Met Ser Asp Asp Leu Ala
275 280 285

Lys Ser Gly Gly Glu Leu Glu Lys Ile Gly Leu Val Pro Leu Ser Asp
290 295 300

Asp Lys Leu Lys Ala Ser Gln Lys His Val Glu Asp Arg Lys Ile Leu
305 310 315 320

Asn Asp Glu Leu Val Lys Ala Gly Lys Val Phe
325 330

<210> 18
<211> 279
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:18 - Cj0636)
<400> 18

Met Gln Asn Ile Leu Ser Ser Phe Ala Gln Glu Lys Asn Val Cys Val
1 5 10 15

Phe Ala Asn Thr Leu Lys Thr Ser Ile Glu Glu Leu Glu Lys Glu Phe

Sequence_Listing_0088562_015US0.TXT

20

25

30

Leu Lys Gln Asn Leu Lys Phe Lys Lys Ile Asn Val Tyr Cys Tyr Leu
35 40 45
Phe Asp Ala Lys Asp Lys Ala Ile Leu Ser Ser Met Lys Ala Phe Asn
50 55 60
Glu Ala His Phe Tyr Ile Gln Asn Tyr Ser Ser Tyr Leu Cys Ala Leu
65 70 75 80
Asn Leu Glu Val Lys Ala Gly Gln Ser Val Leu Asp Met Cys Ala Ala
85 90 95
Pro Gly Gly Lys Ser Ile Asn Leu Ala Asn Phe Met Gln Asn Thr Gly
100 105 110
Tyr Leu Ala Cys Asn Glu Met Ser Arg Asp Arg Phe Phe Ile Leu Gln
115 120 125
Lys Asn Leu Lys Asn Tyr Gly Val Asn Ala Lys Val Phe Met Lys Asp
130 135 140
Gly Lys Asn Ile Gly Asn Leu Cys Pro Leu Lys Phe Asp Lys Ile Leu
145 150 155 160
Leu Asp Ala Pro Cys Ser Thr Phe Ala Lys Ile Gly Phe Asp Leu Glu
165 170 175
Lys Ser Tyr Lys Glu Ile Lys Asn Ile Ala Lys Thr Gln Lys Lys Leu
180 185 190
Leu His Ser Ala Leu Lys Ala Leu Lys Ile Gly Gly Glu Leu Val Tyr
195 200 205
Ser Thr Cys Thr Phe Thr Lys Glu Glu Asn Glu Glu Val Ile Glu Asn
210 215 220
Ala Leu Lys Ser Glu Phe Lys Leu Glu Leu Leu Asp Ile Asp Leu Glu
225 230 235 240
Asn Val Glu Ala Lys Ala Gly Gln Ser Glu Glu Phe Ala Glu Ile Ser
245 250 255
Lys Cys Arg Arg Ile Leu Pro Ser Leu Asp Tyr Asp Gly Phe Phe Ile
260 265 270
Ala Lys Leu Arg Lys Leu Cys

275

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<210> 19
<211> 238
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:19 - Cj0706)

<400> 19
Met Asn Lys Tyr Leu Glu Gln Leu Val Leu Leu Ser Lys Ile Asp Gln
1      5      10      15
Glu Ile Asp Ser Tyr Glu Pro Lys Ile Asp Ser Ile Asn Lys Thr Leu
20     25     30
Lys Asp Ala Glu Leu Lys Ile Glu Lys Ile Asn Ala Asp Leu Glu Lys
35     40     45
Ile Asp Glu Glu Ile Lys Asp Ile Glu Asn Gln Lys Ile Gln Asn Asn
50     55     60
Ala His Ile Ser Glu Phe Ser Ala Lys Ile Lys Asp Leu Ser Lys Lys
65     70     75     80
Ser Gly Val Val Lys Thr Glu Lys Glu Ala Asn Ala Leu Lys Ile Glu
85     90     95
Glu Asp Ile Ala Lys Glu Gln Leu Asp Ala Ala Asn Asp Glu Ile Val
100    105    110
Arg Leu Asp Lys Ile Leu Glu Asn Lys Glu Thr Tyr Lys Lys Glu Leu
115    120    125
Glu Glu Glu Lys Ile Lys Gln Glu Gln Asn Ile Asn Glu Ile Arg Val
130    135    140
Ser Ile Lys Ser Glu Met Glu Val Leu Glu Lys Asp Arg Met Ser Val
145    150    155    160
Tyr Asp Lys Lys Thr Lys Leu Val Ser Glu Met Asn Gln Lys Val Leu
165    170    175
Ser Phe Tyr Glu Lys Ile Arg Lys Trp Ala Lys Asn Thr Ala Val Val
180    185    190
Pro Val Lys Lys Gln Ala Cys Tyr Gly Cys Phe Met Lys Ile Tyr Asp
195    200    205
Lys Thr Tyr Leu Ser Val Val Lys Gly Glu Glu Ile Val Thr Cys Pro
210    215    220

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Sequence_Listing_0088562_015US0.TXT

His Cys Gly Arg Ile Leu Tyr Lys Glu Gln Glu Glu Asn
225 230 235

<210> 20
<211> 137
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:20 - Cj0715)
<400> 20

Met Phe Ser Ile Lys Lys Thr Leu Leu Ile Leu Ala Ser Val Pro Met
1 5 10 15

Phe Leu Ser Ala Thr Glu Tyr Gln Leu Ser Thr His Val Leu Asp Ile
20 25 30

Thr Ser Gly Gln Pro Ala Pro Lys Val Lys Val Glu Leu Tyr Lys Leu
35 40 45

Glu Ala Asn Gln Gln Trp Lys Lys Val Ser Glu Glu Phe Thr Glu Glu
50 55 60

Asn Gly Arg Ile Gly Asp Leu Leu Pro Tyr Glu Lys Ala Glu Asn Arg
65 70 75 80

Ala Phe Gly Ile Tyr Lys Leu Lys Phe Phe Thr Lys Asp Tyr Tyr Thr
85 90 95

Ser His Lys Ile Asn Thr Phe Tyr Pro Phe Val Glu Val Ser Phe Glu
100 105 110

Leu Ser Lys Asp Gln Lys His Tyr His Val Pro Ile Thr Leu Ser Pro
115 120 125

Phe Gly Tyr Ser Thr Tyr Arg Gly Ser
130 135

<210> 21
<211> 175
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:21 - Cj0779)
<400> 21

Met Ser Ile Val Asn Phe Lys Gly Asn Pro Val Lys Leu Lys Gly Asn
1 5 10 15

Ser Val Glu Val Gly Ala Asp Ala Pro Lys Val Asn Leu Lys Ala Lys
20 25 30

Sequence_Listing_0088562_015US0.TXT

Asp Leu Ser Val Ile Glu Ile Gly Ala Ala Gly Lys Thr Gln Ile Ile
35 40 45

Leu Ser Val Pro Ser Leu Asp Thr Pro Val Cys Ala Thr Glu Ala Arg
50 55 60

Glu Phe Asn Lys Lys Val Ala Ser Tyr Asn Gly Ala Glu Val Ile Val
65 70 75 80

Val Ser Met Asp Leu Pro Phe Ala Met Gly Arg Phe Cys Ser Thr Glu
85 90 95

Gly Ile Glu Asn Leu Ser Val Ala Ser Asp Phe Val Ala Lys Glu Phe
100 105 110

Gly Glu Lys Tyr Gly Val Leu Ile Asn Glu Gly Ala Leu Glu Gly Leu
115 120 125

Leu Ala Arg Ala Val Phe Val Ile Lys Glu Gly Lys Val Ala Tyr Lys
130 135 140

Glu Leu Val Asn Glu Ile Thr Glu Met Pro Asp Ile Ala Lys Leu Asp
145 150 155 160

Ala Phe Phe Gly Gly Ser Ser Cys Cys Gly Gly Cys Gly Cys His
165 170 175

<210> 22
<211> 139
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:22 - Cj0909)
<400> 22

Met Lys Lys Ile Leu Leu Leu Gly Ala Leu Phe Ala Val Asn Leu Trp
1 5 10 15

Ala Val Asn Asp Ile Glu Val Lys Asn Ala Phe Val Lys Gln Thr Pro
20 25 30

Pro His Ala Gln Asn Ser Ala Ile Phe Leu Thr Ile Phe Asn Asn Thr
35 40 45

Asn Lys Asp Ile Ala Leu Ile Ser Ala Lys Ser Asp Ile Ser Glu Val
50 55 60

Ser Glu Leu His Thr His Ile His Lys Asp Gly Lys Met Met Met Gln
65 70 75 80

Lys Ile Pro Glu Ile Ile Ile Lys Ala His Ser Ser Thr Glu Leu Lys

85

90

95

Ser Gly Gly Tyr His Ile Met Leu Leu Lys Leu Lys Lys Pro Ile Ile
 100 105 110

Lys Asp Thr Lys Val Asn Leu Asp Leu Lys Phe Asn Asn His Lys Thr
 115 120 125

Ile Glu Leu Lys Asn Ile Asp Ser Lys Glu Phe
 130 135

<210> 23

<211> 306

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:23 - Cj0994c)

<400> 23

Met Lys His Phe Leu Thr Leu Arg Asp Phe Ser Lys Glu Glu Ile Leu
 1 5 10 15

Ser Leu Val Asn His Ala Ser Glu Leu Lys Lys Glu Pro Lys Lys Leu
 20 25 30

Leu Gln Asp Lys Thr Leu Ala Met Ile Phe Glu Lys Asn Ser Thr Arg
 35 40 45

Thr Arg Met Ala Phe Glu Leu Ala Ile Thr Glu Leu Gly Gly Lys Ala
 50 55 60

Leu Phe Leu Ser Ser Asn Asp Leu Gln Leu Ser Arg Gly Glu Pro Val
 65 70 75 80

Lys Asp Thr Ala Arg Val Ile Gly Ala Met Val Asp Phe Val Met Met
 85 90 95

Arg Val Asn Lys His Glu Thr Leu Leu Glu Phe Ala Arg Tyr Ser Lys
 100 105 110

Ala Pro Val Ile Asn Ala Leu Ser Glu Leu Tyr His Pro Thr Gln Val
 115 120 125

Leu Gly Asp Leu Phe Thr Ile Lys Glu Trp Asn Lys Met Gln Asn Gly
 130 135 140

Ile Ala Lys Val Ala Phe Ile Gly Asp Ser Asn Asn Met Cys Asn Ser
 145 150 155 160

Trp Leu Ile Thr Ala Ala Ile Leu Gly Phe Glu Ile Ser Ile Ala Met
 165 170 175

Sequence_Listing_0088562_015US0.TXT

Pro Lys Asn Tyr Lys Ile Ser Pro Glu Ile Trp Glu Phe Ala Met Lys
180 185 190

Gln Ala Leu Ile Ser Gly Ala Lys Ile Ser Leu Gly Tyr Asp Lys Phe
195 200 205

Glu Ala Leu Lys Asp Lys Asp Val Val Ile Thr Asp Thr Trp Val Ser
210 215 220

Met Gly Glu Glu Asn Glu Lys Glu Arg Lys Ile Lys Glu Phe Glu Gly
225 230 235 240

Phe Met Ile Asp Glu Lys Ala Met Ser Val Ala Asn Lys Asp Ala Ile
245 250 255

Leu Leu His Cys Leu Pro Ala Tyr Arg Gly Tyr Glu Val Ser Glu Glu
260 265 270

Ile Phe Glu Lys His Ala Asp Val Ile Phe Glu Glu Ala Arg Asn Arg
275 280 285

Leu Tyr Val Val Lys Ala Leu Leu Cys Phe Leu Asp Asn Gln Arg Gly
290 295 300

Arg Glu
305

<210> 24
<211> 190
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:24 - Cj0998c)
<400> 24

Met Lys Lys Ile Leu Val Ser Val Leu Ser Ser Cys Leu Leu Ala Ser
1 5 10 15

Ala Leu Ser Ala Val Ser Phe Lys Glu Asp Ser Leu Lys Ile Ser Phe
20 25 30

Glu Gly Tyr Lys Thr Lys Asp Met Ile Gly Thr Lys Gly Glu Phe Lys
35 40 45

Asn Val Glu Tyr Lys Phe Ser Lys Asn Ile Lys Asp Leu Ala Ser Tyr
50 55 60

Leu Lys Gly Ala Lys Ala Thr Ile Lys Pro Ser Asn Ala Phe Met Gly
65 70 75 80

Sequence_Listing_0088562_015US0.TXT

Glu Gly Asn Asp Ile Ile Thr Asn Asn Ile Thr Lys Val Phe Phe Pro
85 90 95

Ala Leu Leu Gly Asp Thr Asp Ile Lys Val Val Phe Gln Asp Val Ile
100 105 110

Ala Gly Glu Asn Lys Gly Val Ile Ser Ala Lys Ile Thr Met Asp Lys
115 120 125

Lys Ser Thr Ile Val Pro Leu Thr Tyr Thr Ile Lys Asp Asn Lys Phe
130 135 140

Glu Ala Lys Gly Gln Leu Asp Leu His Thr Phe Lys Asn Gly Ser Lys
145 150 155 160

Ala Leu Lys Ala Leu Ser Asp Val Ala Ala Gly His Gly Gly Ile Ser
165 170 175

Trp Pro Leu Val Asp Ile Ser Phe Asn Ala Asp Leu Ala Glu
180 185 190

<210> 25

<211> 369

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:25 - Cj1018c)

<400> 25

Met Lys Lys Ser Leu Ile Leu Ala Ser Ile Leu Ser Leu Ser Leu Ser
1 5 10 15

Ala Ala Glu Val Lys Ile Gly Val Val Leu Pro Leu Ser Gly Ala Thr
20 25 30

Ala Ala Tyr Gly Gln Ser Ala Leu Glu Gly Ile Lys Leu Ala Asn Ser
35 40 45

Met Gln Ser Ala Leu Ser Asn Gly Asp Lys Val Ser Leu Ala Ile Ile
50 55 60

Asp Thr Lys Gly Asp Lys Leu Glu Ser Ser Ser Gly Ala Asn Arg Leu
65 70 75 80

Val Ser Gln Asp Lys Val Ile Gly Leu Ile Gly Glu Met Val Thr Ala
85 90 95

Asn Thr Leu Gln Val Met Arg Val Ala Glu Asp Asn Lys Ile Pro Leu
100 105 110

Sequence_Listing_0088562_015US0.TXT

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Ile Ala Pro Ala Ala Thr Gly Asp Arg Leu Leu Asp Lys Lys Ile Tyr
115                               120               125

Ser Ser Arg Val Cys Phe Met Asp Ser Phe Gln Gly Ser Ser Leu Ala
130                               135               140

Lys Tyr Val Phe Ser Lys Leu Asn Tyr Lys Ser Ala Val Ile Val Val
145                               150               155               160

Asp Gln Ser Thr Asp Tyr Ser Leu Gly Leu Ala Lys Ala Phe Glu Lys
165                               170               175

Gln Tyr Lys Ser Asn Gly Gly Gln Ile Leu Arg Ile Leu Arg Val Asn
180                               185               190

Ser Gly Asp Lys Asp Phe Arg Ala Ile Val Ala Gln Val Lys Ser Leu
195                               200               205

Asn Pro Glu Phe Ile Phe Leu Pro Leu Tyr Tyr Ser Glu Ala Ser Leu
210                               215               220

Phe Ala Arg Gln Ser Lys Leu Ala Gly Leu Asn Ile Pro Met Gly Ser
225                               230               235               240

Ala Asp Gly Val Ala Asp Gln Thr Phe Ile Ser Leu Ala Gly Asp Ala
245                               250               255

Ser Glu Gly Tyr Ile Phe Thr Asp Ser Phe Asp Ala Asn Asn Pro Thr
260                               265               270

Thr Lys Leu Ser Lys Glu Phe Ile Ser Val Tyr Glu Lys Ala Lys Gly
275                               280               285

Thr Lys Glu Val Pro Asn Phe Ser Ala Met Gly Ala Asp Ala Tyr Phe
290                               295               300

Val Met Leu Asn Ala Met Asn Ala Cys Val Glu Asn Leu Thr Ser Lys
305                               310               315               320

Cys Val Asn Glu Lys Ile His Gln Thr Lys Asn Tyr Gln Gly Val Ser
325                               330               335

Gly Val Ile Ser Ile Asp Gln Thr Gly Asn Ala Thr Arg Ser Val Val
340                               345               350

Val Lys Glu Ile Lys Asn Gln Lys Gln Asn Tyr Lys Asp Ile Ile Asn
355                               360               365

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Sequence_Listing_0088562_015US0.TXT

Pro

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<210> 26
<211> 371
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:26 - Cj1019c)

<400> 26
Met Lys Lys Leu Thr Leu Thr Leu Ser Val Leu Thr Met Val Asn Cys
1      5      10     15
Leu Tyr Ala Lys Asp Ile Asn Ile Gly Val Val Leu Pro Leu Thr Gly
20     25     30
Thr Val Ala Ala Tyr Gly Gln Asp Val Phe Asn Gly Ile Glu Leu Ala
35     40     45
Asn Lys Leu Gln Pro Lys Leu Ser Asn Gly Asp Val Ile Lys Leu Ile
50     55     60
Thr Ile Asp Thr Lys Gly Asp Lys Leu Glu Thr Ser Asn Gly Val Asn
65     70     75     80
Arg Leu Ile Ala Thr Asp Lys Val Leu Gly Ile Ile Gly Glu Ala Thr
85     90     95
Thr Pro Asn Thr Ile Gln Ala Ile Ser Ile Ala Glu Glu Lys Lys Ile
100    105    110
Pro Leu Ile Ala Pro Val Ala Ser Gly Asp Lys Leu Leu Asp Lys Lys
115    120    125
Lys Tyr Ala Ser Arg Val Cys Phe Lys Asp Ser Phe Gln Gly Asp Lys
130    135    140
Phe Ala Thr Tyr Val Ser Lys Asp Leu Gly Leu Lys Asn Ala Val Ile
145    150    155    160
Ile Ile Asp Gln Ser Asn Val Tyr Ser Leu Gly Leu Ala Arg Ala Phe
165    170    175
Glu Asn Ser Phe Lys Asn Asn Gly Gly Lys Ile Ile Lys Lys Leu Val
180    185    190
Ile Asn Ser Gly Asp Lys Asp Phe Arg Ala Val Val Ser Gln Leu Lys
195    200    205
Ser Leu Asn Pro Asp Phe Val Tyr Met Pro Ile Tyr His Pro Glu Ala

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210

Ala Leu Ile Ala Arg Gln Ala Arg Gln Ile Gly Phe Asp Lys Leu Leu
225 230 235 240
Val Ala Gly Asp Gly Val Asn Asn Gln Thr Phe Ile Asp Leu Gly Gly
245 250 255
Ser Ala Val Asn Gly Val Ile Phe Thr Asp Ser Phe Asp Tyr Asn Ser
260 265 270
Pro Ser Thr Gln Leu Gly Lys Asp Phe Val Ala Ala Tyr Glu Lys Val
275 280 285
Lys Gly Thr Lys Glu Leu Pro Ala Phe Ser Ala Met Gly Ala Asp Ala
290 295 300
Tyr Phe Val Met Leu Asn Ala Met Asn Ala Cys Val Asp Asn Leu Ser
305 310 315 320
Ser Glu Cys Ile Asn Ser Lys Ile His Gln Thr Lys Asp Phe Gln Ala
325 330 335
Val Gly Gly Val Ile Ser Ile Asp Glu Ser Gly Asn Ala Ile Arg Ser
340 345 350
Val Val Ile Lys Glu Ile Gln Asn Gln Lys Gln Asn Tyr Lys Thr Ile
355 360 365
Ile Asn Pro
370

<210> 27
<211> 283
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:27 - Cj1041c)
<400> 27

Met Lys Lys Tyr Val Leu Ser Leu Ala Leu Leu Gly Ser Leu Leu Gly
1 5 10 15
Ala Ser Glu Leu Lys Tyr Gln Glu Phe Asp Gly Phe Lys Ser Pro Glu
20 25 30
Ser Ile Phe Val Asp Lys Asn Tyr Val Tyr Val Ser Asn Val Gly Glu
35 40 45
Lys Leu Glu Pro Leu Ala Lys Asp Asn Asp Gly Phe Ile Ser Lys Leu
50 55 60

Sequence_Listing_0088562_015US0.TXT

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Asp Lys Asn Gly Lys Val Leu Glu Tyr Lys Phe Leu Thr His Leu Asn
65      70      75      80

Ala Pro Lys Gly Met Met Glu Ile Gly Lys Thr Leu Tyr Val Val Asp
      85      90      95

Ile Asp Val Leu Arg Gly Phe Asp Leu Lys Thr Lys Lys Glu Ile Phe
      100      105      110

Asn Leu Pro Ile Lys Gly Ala Ile Phe Leu Asn Asp Ile Glu Lys Leu
      115      120      125

Asp Asp Asn Thr Leu Leu Val Ser Asp Thr Gly Thr Gly Leu Ile Leu
      130      135      140

Lys Val Asp Leu Lys Thr Lys Gln Tyr Asp Glu Leu Leu Lys Leu Asp
145      150      155      160

Leu Ala Lys Phe Gly Gly Pro Asn Gly Leu Tyr Leu Asp Arg Lys Lys
      165      170      175

His Lys Leu Phe Ile Ala Gly Tyr His Pro Asp Gly Val Ser Gly Gly
      180      185      190

Val Val Met Ala Tyr Asp Leu Asn Thr Lys Glu Leu Ser Ile Ile Lys
      195      200      205

Asn Glu Lys Glu Ser Tyr Asp Gly Ile Val Pro Tyr Lys Asp Gly Leu
      210      215      220

Leu Val Ser Ser Trp Gly Asn Asn Leu Asn Gly Tyr Ile Tyr Asn Leu
225      230      235      240

Asp Asn Val Lys Ser Val Lys Leu Glu Leu Pro Leu Met Lys Gly Pro
      245      250      255

Ala Asp Ile Phe Ile Glu Gly Asn Ile Leu Trp Ile Pro Lys Met Val
      260      265      270

Glu Gly Lys Ile Phe Lys Val Glu Leu Asn Lys
      275      280

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<210> 28
<211> 100
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:28 - Cj1153)
<400> 28

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Sequence_Listing_0088562_015US0.TXT

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Met Lys Lys Leu Leu Val Val Ser Ala Leu Ala Cys Leu Gly Val Ser
1      5      10      15
Ala Phe Ala Ala Asp Gly Ala Thr Leu Phe Lys Lys Cys Ala Val Cys
20      25      30
His Gly Ala Asn Ala Asp Lys Val Tyr Leu Asn Lys Val Pro Ala Leu
35      40      45
Lys Thr Leu Ser Ser Ala Glu Arg Leu Gln Tyr Met Lys Glu Tyr Ser
50      55      60
Glu Gly Lys Arg Asn Ala Tyr Gly Gln Gly Ala Ile Met Lys Leu Asn
65      70      75      80
Leu Lys Gly Leu Thr Glu Glu Asp Phe Lys Ala Ile Glu Ala His Ile
85      90      95
Glu Thr Leu Lys
100

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<210> 29
<211> 241
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:29 - Cj1214c)
<400> 29

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Met Phe Lys Thr Ile Val Cys Phe Leu Ala Leu Asn Leu Ser Leu Phe
1      5      10      15
Ala Val Gly Phe Asp Leu Lys Pro Ile Lys Ser Glu Leu Val Lys Val
20      25      30
Asp Asp Ile Tyr Gly Tyr Ile Lys Asp Ser Asp Asp Ile Lys Leu Tyr
35      40      45
Ser Ser Gly Val Val Val Gln His Phe Ser Asn Ser Gln Ser Ile Ile
50      55      60
Ala Arg Ala Ser Val Ile Asp Lys Lys Asn Gly Leu Ala Lys Leu Glu
65      70      75      80
Phe Ser Val Phe Ser Ala Leu Lys Gln Asp Ala Leu Pro Leu Pro Asn
85      90      95
Val Leu Pro Lys Val Gly Asp Glu Val Val Leu Asn Phe Leu Tyr Asp
100      105      110

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Sequence_Listing_0088562_015US0.TXT

Arg Gly Leu Val Ile Ala Pro Asp Glu Gln Thr Tyr Asn Glu Leu Val
115 120 125

Arg Glu Phe Pro Gln Ile Tyr Phe Thr His Ile Asp Ile Phe Gly Ala
130 135 140

Gln Leu Ile Arg Thr Ala Thr Leu Ser Pro Lys Arg Ser Asp Phe Arg
145 150 155 160

Gln Phe Cys Asp Asp Asn Ala Val Gly Ile Leu Val Val Ala Leu Glu
165 170 175

Asn His Ala Glu Val Val Asp Cys Gln Asp Phe Asn Lys Leu Tyr Glu
180 185 190

Val Pro Ile Ser Lys Pro Thr Ser Val Gln Val Pro Phe Tyr Ser Arg
195 200 205

Ile Gly Gly Tyr Lys Ser Asn Phe Phe Asp Phe Asn Ser Gln Glu Ile
210 215 220

Gly Asn Tyr Tyr Arg Tyr Tyr Asp Ala Leu Ile Asn Leu Pro Lys Val
225 230 235 240

Gln

<210> 30

<211> 411

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:30 - Cj1287c)

<400> 30

Met Asn Leu Lys Glu Glu Ala Leu Lys Tyr His Leu Gly Gly Lys Ile
1 5 10 15

Asp Ile Val Pro Ser Lys Pro Met Ala Thr Ser Tyr Asp Leu Ser Leu
20 25 30

Ala Tyr Ser Pro Gly Val Ala Glu Pro Cys Leu Glu Ile Ala Lys Asp
35 40 45

Asn Glu Leu Ala Tyr Thr Tyr Thr Asn Lys Ala Asn Leu Val Ala Ile
50 55 60

Val Ser Asp Gly Ser Ala Val Leu Gly Leu Gly Asn Ile Gly Ala Gln
65 70 75 80

Ala Ser Lys Pro Val Met Glu Gly Lys Ala Cys Leu Phe Lys Lys Phe

Ala Asn Val Asn Ala Tyr Asp Ile Glu Ile Asn Val His Ser Ile Glu
 100 105 110
 Glu Ile Val Asn Phe Cys Lys Ala Leu Ala Pro Thr Val Gly Gly Ile
 115 120 125
 Asn Leu Glu Asp Ile Ala Ala Pro Lys Cys Phe Glu Ile Glu Ala Ala
 130 135 140
 Leu Gln Asp Leu Gly Ile Pro Val Met His Asp Asp Gln His Gly Thr
 145 150 155 160
 Ala Ile Ile Ser Thr Ala Gly Leu Met Asn Ala Met Glu Ile Ser Gly
 165 170 175
 Lys Lys Phe Lys Asp Ile Lys Val Val Val Ser Gly Ala Gly Ala Ala
 180 185 190
 Gly Ile Ala Ser Ala Lys Met Tyr Arg Asn Leu Gly Val Glu Asn Ile
 195 200 205
 Ile Leu Val Asp Ser Lys Gly Val Ile Ser Lys Asp Arg Asn Asp Leu
 210 215 220
 Thr Pro Gln Lys Leu Glu Phe Ala Val Asp Ser Lys Glu Lys Thr Leu
 225 230 235 240
 Lys Glu Val Leu Lys Gly Ala Asp Val Phe Leu Gly Leu Ser Ala Pro
 245 250 255
 Lys Ile Leu Asp Asp Glu Met Val Leu Ser Met Ala Lys Asp Pro Val
 260 265 270
 Ile Phe Ala Leu Ala Asn Pro Ile Pro Glu Val Met Pro Glu Asp Val
 275 280 285
 Ala Arg Leu Arg Lys Asp Ala Ile Val Gly Thr Gly Arg Ser Asp Tyr
 290 295 300
 Pro Asn Gln Ile Asn Asn Val Leu Gly Phe Pro Phe Ile Phe Arg Gly
 305 310 315 320
 Ala Leu Asp Val Arg Ala Ser Lys Ile Thr Glu Asn Met Lys Val Ala
 325 330 335
 Ala Ala Lys Ala Leu Ala Asp Leu Ala Lys Leu Pro Val Ser Asp Ala

Sequence_Listing_0088562_015US0.TXT

340

345

350

Val Lys Lys Ala Tyr Asn Leu Ser Thr Leu Glu Phe Gly Arg Asp Tyr
355 360 365

Val Ile Pro Lys Pro Phe Asp Glu Arg Val Lys Ala Ala Val Ser Thr
370 375 380

Ala Val Ala Ala Ala Ala Val Lys Asp Gly Val Ala Lys Val Lys Asn
385 390 395 400

Phe Asp Glu Lys Ala Tyr Phe Glu Ser Leu Lys
405 410

<210> 31
<211> 236
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:31 - Cj1380)

<400> 31

Met Lys Lys Leu Ser Leu Ile Leu Val Cys Ser Ala Ser Leu Phe Ala
1 5 10 15

Ala Ser Asn Ser Glu Ile Ser Asp Phe Tyr Ser Lys Ser Ile Lys Ala
20 25 30

Gln Phe Pro Asn Ala Thr Val Ser Val Ser Asn Arg Gln Lys Val Gly
35 40 45

Asn Thr Gly Phe Glu Ser Val Ile Val Ser Val Glu Leu Asn Gly Gln
50 55 60

Lys Gln Glu Asn Ile Leu Phe Thr Lys Asp Ser Leu Ile Thr Pro Asp
65 70 75 80

Leu Ile Asp Leu Lys Thr Gly Ile Ser Tyr Ala Gln Glu Tyr Glu Met
85 90 95

Lys Lys Phe Gln Glu Ala Arg Glu Asn Phe Thr Lys Asn Ala Lys Ala
100 105 110

Val Ala Gln Lys Glu Thr Met Val Ile Ala Leu Gly Asp Lys Asn Lys
115 120 125

Pro Ala Ile Tyr Val Phe Ser Asp Pro Glu Cys Pro Tyr Cys Arg Glu
130 135 140

His Leu Ala Gln Ile Asp Asp Glu Leu Lys Asn Tyr Gln Val Asn Tyr
145 150 155 160

Sequence_Listing_0088562_015US0.TXT

Ile Leu Thr Pro Val His Gly Lys Ser Ala Phe Glu Lys Ser Ala Leu
165 170 175

Ile Tyr Lys Glu Ala Lys Lys Ala Lys Asn Asp Lys Glu Lys Ile Ala
180 185 190

Ile Leu Asn Lys Tyr Tyr Asp Ala Asn Ile Lys Asn Tyr Pro Lys Val
195 200 205

Ser Asp Ala Glu Leu Lys Glu Val Phe Ser Leu Tyr Glu Lys Tyr Arg
210 215 220

Ser Leu Gly Leu Ser Ala Thr Pro Thr Ile Ile Lys
225 230 235

<210> 32

<211> 172

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:32 - Cj1496c)

<400> 32

Met Ile Lys Lys Phe Ile Leu Leu Val Phe Ile Ser Ser Val Val Phe
1 5 10 15

Gly Ala Glu Gln Asp Cys Glu Gln Tyr Phe Glu Ala Arg Lys Ala Gln
20 25 30

Ile Glu Leu Gln Thr Arg Glu Phe Asp Glu Ala Arg Gln Ser Leu Glu
35 40 45

Ala Tyr Lys Ala Ser Phe Glu Ala Leu Gln Lys Glu Arg Leu Glu Asn
50 55 60

Leu Glu Lys Lys Glu Ala Glu Val Asn Ala Thr Leu Ala Lys Ile Glu
65 70 75 80

Glu Leu Lys Leu Glu Asn Ala Arg Leu Val Glu Glu Gln Gln Lys Ile
85 90 95

Leu Asn Ser Ile Asn Asp Lys Thr Gln Gly Arg Val Lys Glu Ile Tyr
100 105 110

Ser Gln Met Lys Asp Ala Ala Ile Ala Asp Val Leu Ser Gln Met Asp
115 120 125

Ala Glu Asp Ala Ser Lys Ile Met Leu Ser Leu Glu Ser Arg Lys Ile
130 135 140

Sequence_Listing_0088562_015US0.TXT

Ser Gly Val Leu Ser Lys Met Asp Pro Lys Lys Ala Ser Glu Leu Thr
145 150 155 160

Leu Leu Leu Lys Asn Leu Asp Asn Asn Ala Ser Asn
165 170

<210> 33
<211> 513
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:33 - Cj1516)

<400> 33

Met Asn Arg Arg Asn Phe Leu Lys Phe Asn Ala Leu Thr Leu Ala Ser
1 5 10 15

Met Gly Val Ala Tyr Ala Asn Pro Met His Asp Met His Ser Met His
20 25 30

Lys Asn His Ser Ile Asn His Asp Leu Asp Thr Ser Phe Ile Asn Phe
35 40 45

Ala Pro Lys Asn Leu Lys Leu Leu Asp Pro Lys Gln Phe Pro Gln Gly
50 55 60

Glu Ile Leu Lys Ala Leu Pro Leu Leu Lys Asn Glu Ser Lys Glu Lys
65 70 75 80

Asn Ile Phe Arg Ala Thr Leu Glu Ile Lys Glu Asn His Ile Glu Leu
85 90 95

Ile Lys Gly Lys Lys Thr Leu Phe Tyr Thr Tyr Asn Gly Leu Val Pro
100 105 110

Ala Pro Lys Ile Glu Val Phe Glu Gly Asp Lys Leu Glu Ile Leu Val
115 120 125

Lys Asn Lys Leu Lys Glu Ala Thr Thr Ile His Trp His Gly Val Pro
130 135 140

Val Pro Pro Asp Gln Asp Gly Ser Pro His Asp Pro Ile Leu Ala Gly
145 150 155 160

Glu Glu Arg Ile Tyr Arg Phe Glu Ile Pro Gln Asp Ser Ala Gly Thr
165 170 175

Tyr Trp Tyr His Pro His Pro His Tyr Thr Ala Ser Lys Gln Val Phe
180 185 190

Sequence_Listing_0088562_015US0.TXT

Met Gly Leu Ala Gly Ala Phe Val Ile Lys Ala Lys Lys Asp Ala Leu
 195 200 205
 Ser His Leu Lys Glu Lys Asp Leu Met Ile Ser Asp Leu Arg Leu Asp
 210 215 220
 Glu Asn Ala Gln Ile Pro Asn Asn Asn Leu Asn Asp Trp Leu Asn Gly
 225 230 235 240
 Arg Glu Gly Glu Phe Val Leu Ile Asn Gly Gln Phe Lys Pro Lys Ile
 245 250 255
 Lys Leu Ala Thr Asn Glu Arg Ile Arg Ile Tyr Asn Ala Thr Ala Ala
 260 265 270
 Arg Tyr Leu Asn Leu Arg Ile Gln Gly Ala Lys Phe Ile Leu Val Gly
 275 280 285
 Thr Asp Gly Gly Leu Ile Glu Lys Ala Ile Tyr Lys Glu Glu Leu Phe
 290 295 300
 Leu Ser Pro Ala Ser Arg Val Glu Val Leu Ile Asp Ala Pro Lys Asp
 305 310 315 320
 Gly Asn Phe Lys Leu Glu Ser Ala Tyr Tyr Asp Arg Asp Lys Met Met
 325 330 335
 Val Lys Glu Glu Ser Asn Thr Leu Phe Leu Ala Asn Ile Asn Leu Lys
 340 345 350
 Lys Glu Lys Leu Glu Leu Pro Lys Asn Leu Lys Ile Phe Lys Pro Leu
 355 360 365
 Glu Glu Pro Lys Glu Phe Lys Glu Ile Ile Met Ser Glu Asp His Met
 370 375 380
 Gln Met His Gly Met Met Gly Lys Ser Glu Asn Glu Leu Lys Ile Ala
 385 390 395 400
 Leu Ala Ser Met Phe Leu Ile Asn Gly Lys Ser Tyr Asp Leu Lys Arg
 405 410 415
 Ile Asp Leu Ser Ser Lys Leu Gly Val Val Glu Asp Trp Ile Val Ile
 420 425 430
 Asn Lys Ser His Met Asp His Pro Phe His Ile His Gly Thr Gln Phe
 435 440 445

Sequence_Listing_0088562_015US0.TXT

Glu Leu Ile Ser Ser Lys Leu Asn Gly Lys Val Gln Lys Ala Glu Phe
450 455 460

Arg Ala Phe Arg Asp Thr Ile Asn Val Arg Pro Asn Glu Glu Leu Arg
465 470 475 480

Leu Lys Met Lys Gln Asp Phe Lys Gly Leu Arg Met Tyr His Cys His
485 490 495

Ile Leu Glu His Glu Asp Leu Gly Met Met Gly Asn Leu Glu Val Lys
500 505 510

Glu

<210> 34
<211> 269
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:34 - Cj1540)
<400> 34

Met Lys Lys Ile Ile Ser Leu Ala Leu Ala Leu Ala Leu Ser Ala Ser
1 5 10 15

Ala Ala Glu Leu Lys Met Ala Thr Thr Thr Ser Thr Asp Asn Thr Gly
20 25 30

Leu Leu Asp Ala Leu Lys Pro Leu Tyr Glu Lys Glu Ser Gly Asn Thr
35 40 45

Leu Lys Trp Val Ala Val Gly Thr Gly Ala Ala Leu Lys Met Gly Glu
50 55 60

Asp Cys Asn Ala Asp Val Leu Phe Val His Ser Pro Lys Ala Glu Lys
65 70 75 80

Glu Phe Met Lys Lys Gly Phe Gly Val Asp Arg Thr Pro Val Met Tyr
85 90 95

Asn Asp Phe Ile Ile Ile Ala Asp Lys Ser Leu Ala Ser Lys Phe Lys
100 105 110

Gly Lys Asn Leu Lys Glu Ser Leu Glu Leu Ile Lys Asn Glu Lys Leu
115 120 125

Thr Phe Ile Ser Arg Gly Asp Lys Ser Gly Thr Asp Asn Lys Glu Lys
130 135 140

Ser Leu Trp Lys Asn Leu Gly Gly Val Pro Glu Lys Gln Ser Trp Tyr

Sequence_Listing_0088562_015US0.TXT

145 150 155 160

Gln Gln Ser Gly Gln Gly Met Leu Ala Ser Ile Lys Ile Ala Glu Glu
165 170 175

Lys Lys Gly Val Ile Leu Thr Asp Arg Gly Thr Tyr Ile Lys Tyr Glu
180 185 190

Ala Asn Glu Lys Gly Lys Pro Asn Leu Val Ile Val Asn Glu Gly Asp
195 200 205

Asp Ser Leu Lys Asn Phe Tyr Ser Val Ile Ala Thr Asn Pro Lys His
210 215 220

Cys Lys Asn Val Asn Tyr Thr Glu Ala Ser Lys Phe Ile Lys Trp Val
225 230 235 240

Thr Ser Asp Lys Thr Leu Asn Phe Ile Ala Asp Phe Lys Leu Leu Asn
245 250 255

Lys Pro Leu Phe Val Ile Asp Ala Lys Thr Arg Lys Asp
260 265

<210> 35
<211> 179
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:35 - Cj1659)

<400> 35

Met Ile Lys Lys Val Leu Ser Val Val Ala Ala Ala Ala Val Ile Ser
1 5 10 15

Thr Asn Leu Phe Ala Gly Glu Val Pro Ile Gly Asp Pro Lys Glu Leu
20 25 30

Asn Gly Met Glu Ile Ala Ala Val Tyr Leu Gln Pro Ile Glu Met Glu
35 40 45

Pro Arg Gly Ile Asp Leu Ala Ala Ser Leu Ala Asp Ile His Leu Glu
50 55 60

Ala Asp Ile His Ala Leu Lys Asn Asn Pro Asn Gly Phe Pro Glu Gly
65 70 75 80

Phe Trp Met Pro Tyr Leu Thr Ile Ala Tyr Glu Leu Lys Asn Thr Asp
85 90 95

Thr Gly Ala Ile Lys Arg Gly Thr Leu Met Pro Met Val Ala Asp Asp
100 105 110

Sequence_Listing_0088562_015US0.TXT

Gly Pro His Tyr Gly Ala Asn Ile Ala Met Glu Lys Asp Lys Lys Gly
115 120 125

Gly Phe Gly Val Gly Asn Tyr Glu Leu Thr Phe Tyr Ile Ser Asn Pro
130 135 140

Glu Lys Gln Gly Phe Gly Arg His Val Asp Glu Glu Thr Gly Val Gly
145 150 155 160

Lys Trp Phe Glu Pro Phe Lys Val Asp Tyr Lys Phe Lys Tyr Thr Gly
165 170 175

Thr Pro Lys

<210> 36
<211> 364
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:36 - Cj1643)
<400> 36

Met Lys Lys Ile Leu Ile Ile Cys Met Leu Phe Thr Leu Ser Phe Gly
1 5 10 15

Ile Glu Arg Pro Lys Phe Glu Asp Phe Leu Ala Gly Tyr Glu Arg Asn
20 25 30

Lys Ala Ser Met Leu Asn Tyr Glu Gly Met Pro Ala Phe Ala Leu Ser
35 40 45

Glu Asn Leu Leu Ala Val Leu Lys Gln Pro Asn Ala Lys Leu Asn Lys
50 55 60

Tyr Val Lys Tyr Asp Pro Phe Leu Asn Leu Tyr Leu Val Arg Thr Asp
65 70 75 80

Phe Ser Leu Ile Pro Thr Pro Met Gly Asp Glu Glu Lys Leu Thr Arg
85 90 95

Asn Asp Trp Val Gly Ile Trp Asp Pro Asn Lys Pro Tyr Ile Gly His
100 105 110

Ile Lys Tyr Leu Ala Gln Asn Ile Asp Glu Lys Asp Gln Leu Asp Phe
115 120 125

Asn Ser Lys Ile Gly Leu Leu Gly Thr Pro Cys Cys Glu Met Met Gly
130 135 140

Sequence_Listing_0088562_015US0.TXT

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Ile Ala Leu Asn Asn Ser Ser Phe Ile Gly Asn Arg Tyr Leu Lys His
145                               150                               155                               160

Phe Met Lys Tyr Asn Asp Val Tyr Trp Gly Asp Ile Gly Val Asp Phe
                               165                               170                               175

Val Val Arg Glu Asn Lys Ile Tyr Val Asn Asn Val Arg Lys Asn Pro
                               180                               185                               190

Gln Phe Leu Ile Asn Asp Gln Val Ile Ser Val Asp Gly Leu Pro Ala
                               195                               200                               205

Asn Asp Leu Arg Lys Leu Asn Glu Lys Ile Leu Phe Ala Asp Arg Gly
                               210                               215                               220

Ser Thr Leu Tyr Phe Gln Val Leu Arg Asp Asn Met Asp Leu Asn Ile
225                               230                               235                               240

Ser Thr Glu Val Phe Ala Lys Asp Leu Ser Lys Phe Asn Leu Pro Asp
                               245                               250                               255

Ser Lys Pro Lys Pro Lys Ile Thr Asn Phe Thr Ser Asn Leu Gly Leu
                               260                               265                               270

Thr Val Asn Ala Ser Leu Val Val Thr Lys Ile Asp Pro Lys Ser Lys
                               275                               280                               285

Val Ser Asn Ala Gly Phe Met Val Gly Asp Lys Ile Leu Arg Val Asn
                               290                               295                               300

Asn Ile Ile Leu Asn Asn Phe Lys Glu Leu Gln Asn Ile Leu Ser Ala
305                               310                               315                               320

Gly Asn Asp Phe Ser Ile Leu Ile Glu Arg Lys Ser Thr Lys Leu Pro
                               325                               330                               335

Leu Ser Asn Phe Asn Asn Glu Leu Gly Gly Asn Ala Asn Ser Gly Gly
                               340                               345                               350

Asp Gly Lys Phe Gln Phe Phe Ile Arg Leu Thr Lys
                               355                               360

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<210> 37
<211> 501
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:37 - Cj0105)
<400> 37

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Sequence_Listing_0088562_015US0.TXT

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Met Lys Phe Lys Ala Asp Glu Ile Ser Ser Ile Ile Lys Glu Arg Ile
1      5      10      15
Glu Asn Phe Asp Leu Asn Leu Glu Ile Glu Glu Thr Gly Lys Ile Ile
20      25      30
Ser Val Ala Asp Gly Val Ala Lys Val Tyr Gly Leu Lys Asn Ile Met
35      40      45
Ala Gly Glu Met Val Glu Phe Glu Asn Gly Asp Lys Gly Met Ala Leu
50      55      60
Asn Leu Glu Glu Ser Ser Val Gly Ile Val Ile Leu Gly Lys Gly Glu
65      70      75      80
Gly Leu Lys Glu Gly Ala Ser Val Lys Arg Leu Lys Lys Leu Leu Lys
85      90      95
Val Pro Val Gly Glu Ala Leu Ile Gly Arg Val Val Asn Ala Leu Gly
100     105     110
Glu Pro Ile Asp Ala Lys Gly Val Ile Asn Ala Asn Glu Tyr Arg Phe
115     120     125
Val Glu Glu Lys Ala Lys Gly Ile Met Ala Arg Lys Ser Val His Glu
130     135     140
Pro Leu His Thr Gly Ile Lys Ala Ile Asp Ala Leu Val Pro Ile Gly
145     150     155     160
Arg Gly Gln Arg Glu Leu Ile Ile Gly Asp Arg Gln Thr Gly Lys Thr
165     170     175
Thr Val Ala Val Asp Thr Ile Ile Ser Gln Arg Gly Gln Gly Val Ile
180     185     190
Cys Ile Tyr Val Ala Ile Gly Gln Lys Gln Ser Thr Val Ala Gln Val
195     200     205
Val Lys Arg Leu Glu Glu His Gly Ala Met Glu Tyr Thr Ile Val Val
210     215     220
Asn Ala Gly Ala Ser Asp Pro Ala Ala Leu Gln Tyr Leu Ala Pro Tyr
225     230     235     240
Thr Gly Val Thr Met Gly Glu Phe Phe Arg Asp Asn Ala Lys His Ala
245     250     255

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Sequence_Listing_0088562_015US0.TXT

Leu Ile Val Tyr Asp Asp Leu Ser Lys His Ala Val Ala Tyr Arg Glu
 260 265 270
 Met Ser Leu Ile Leu Arg Arg Pro Pro Gly Arg Glu Ala Tyr Pro Gly
 275 280 285
 Asp Val Phe Tyr Leu His Ser Arg Leu Leu Glu Arg Ala Ser Lys Leu
 290 295 300
 Asn Asp Glu Leu Gly Ala Gly Ser Leu Thr Ala Leu Pro Ile Ile Glu
 305 310 315 320
 Thr Gln Ala Gly Asp Val Ser Ala Tyr Ile Pro Thr Asn Val Ile Ser
 325 330 335
 Ile Thr Asp Gly Gln Ile Phe Leu Glu Thr Asp Leu Phe Asn Ser Gly
 340 345 350
 Ile Arg Pro Ala Ile Asn Val Gly Leu Ser Val Ser Arg Val Gly Gly
 355 360 365
 Ala Ala Gln Ile Lys Ala Thr Lys Gln Val Ser Gly Thr Leu Arg Leu
 370 375 380
 Asp Leu Ala Gln Tyr Arg Glu Leu Gln Ala Phe Ala Gln Phe Ala Ser
 385 390 395 400
 Asp Leu Asp Glu Ala Ser Arg Lys Gln Leu Glu Arg Gly Gln Arg Met
 405 410 415
 Val Glu Leu Leu Lys Gln Pro Pro Tyr Ser Pro Leu Ser Val Glu Lys
 420 425 430
 Gln Val Val Leu Ile Phe Ala Gly Thr Lys Gly Phe Leu Asp Asp Ile
 435 440 445
 Ala Val Ser Arg Ile Lys Glu Phe Glu Asp Gly Ile Tyr Pro Phe Ile
 450 455 460
 Glu Ala Lys His Pro Asp Ile Phe Glu Gln Ile Arg Ser Lys Lys Ala
 465 470 475 480
 Leu Asp Ser Asp Leu Glu Glu Lys Leu Ala Lys Ala Ile Asn Glu Phe
 485 490 495
 Lys Ala Asn His Leu
 500

Sequence_Listing_0088562_015US0.TXT

<210> 38

<211> 334

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:38 - Cj0175)

<400> 38

Met Lys Lys Ile Phe Phe Met Phe Leu Thr Ala Val Ser Phe Leu Gly
1 5 10 15

Ala Ser Glu Leu Asn Ile Tyr Ser Ala Arg His Tyr Asn Ala Asp Phe
20 25 30

Glu Ile Ile Lys Lys Phe Glu Glu Lys Thr Gly Ile Lys Val Asn His
35 40 45

Thr Gln Ala Lys Ala Ser Glu Leu Ile Lys Arg Leu Ser Leu Glu Gly
50 55 60

Ser Asn Ser Pro Ala Asp Ile Phe Ile Thr Ala Asp Ile Ser Asn Leu
65 70 75 80

Thr Glu Ala Lys Asn Leu Gly Leu Leu Ser Pro Val Ser Ser Lys Tyr
85 90 95

Leu Glu Glu Phe Ile Pro Ala His Leu Arg Asp Lys Asp Lys Glu Trp
100 105 110

Phe Ala Ile Thr Lys Arg Ala Arg Ile Ile Ala Tyr Asn Lys Asn Thr
115 120 125

Asn Ile Asp Ile Ser Lys Met Lys Asn Tyr Glu Asp Leu Ala Lys Ala
130 135 140

Glu Phe Lys Gly Glu Ile Val Met Arg Ser Ala Thr Ala Pro Tyr Ser
145 150 155 160

Lys Thr Leu Leu Ala Ser Ile Ile Ala Asn Asp Gly Asn Lys Glu Ala
165 170 175

Lys Ala Trp Ala Lys Gly Val Leu Glu Asn Leu Ala Thr Asn Pro Lys
180 185 190

Gly Gly Asp Arg Asp Gln Ala Arg Gln Val Phe Ala Gly Glu Ala Lys
195 200 205

Phe Ala Val Met Asn Thr Tyr Tyr Ile Gly Leu Leu Lys Asn Ser Lys
210 215 220

Asn Pro Lys Asp Val Glu Val Gly Asn Ser Leu Gly Ile Ile Phe Pro

Sequence_Listing_0088562_015US0.TXT

225 230 235 240

Asn Gln Asp Asn Arg Gly Thr His Ile Asn Ile Ser Gly Ile Ala Met
245 250 255

Thr Lys Ser Ser Lys Asn Gln Asp Ala Ala Lys Lys Phe Met Glu Phe
260 265 270

Met Leu Ser Pro Glu Ile Gln Lys Ile Leu Thr Asp Ser Asn Tyr Glu
275 280 285

Phe Pro Ile Arg Asn Asp Val Glu Leu Ser Gln Thr Val Lys Asp Phe
290 295 300

Gly Thr Phe Lys Glu Asp Gln Ile Pro Val Ser Lys Ile Ala Glu Asn
305 310 315 320

Ile Lys Glu Ala Val Lys Ile Tyr Asp Glu Val Gly Phe Arg
325 330

<210> 39

<211> 173

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:39 - Cj0283c)

<400> 39

Met Ser Asn Glu Lys Leu Glu Gln Ile Leu Gln Lys Gln Gln Thr Gln
1 5 10 15

Met Ala Gly Pro Asp Val Asp Gln Arg Glu Asp Asp Ile Ile Gln Leu
20 25 30

Val Gly Phe Val Val Gly Asp Glu Glu Tyr Ala Ile Pro Ile Leu Asn
35 40 45

Ile Gln Glu Ile Ile Lys Pro Ile Glu Tyr Thr Arg Val Pro Ser Val
50 55 60

Pro Asp Tyr Val Leu Gly Val Phe Asn Met Arg Gly Asn Val Met Pro
65 70 75 80

Leu Ile Asp Leu Ala Gln Arg Phe His Leu Gly Ser Ser Lys Met Thr
85 90 95

Pro Gln Thr Arg Tyr Ile Val Leu Arg Gly Glu Thr Asn Gly Thr Gly
100 105 110

Val Gly Gly Asn Ala Gly Phe Val Ile Asp Arg Leu Thr Glu Ala Ile
115 120 125

Sequence_Listing_0088562_015US0.TXT

Lys Ile His Arg Asn Arg Ile Asp Pro Pro Pro Glu Thr Leu Val Lys
130 135 140

Asp Lys Gly Met Ile Tyr Gly Ile Gly Lys Arg Asp Glu Asn Ile Leu
145 150 155 160

Thr Ile Leu Lys Val Glu Ala Leu Leu Lys Arg Glu Phe
165 170

<210> 40
<211> 249
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:40 - Cj0303c)
<400> 40

Met Lys Lys Phe Val Val Phe Phe Gly Ile Leu Leu Phe Val Ser Cys
1 5 10 15

Leu Asn Ala Gln Asn Leu Ser Ile Phe Val Ala Ser Ser Ala Ser Lys
20 25 30

Ala Met Ser Glu Val Lys Asp Glu Phe Leu Lys Thr His Pro Glu Asp
35 40 45

Lys Ile Glu Leu Val Phe Gly Ala Ser Gly Lys Tyr Tyr Glu Leu Leu
50 55 60

Lys Gln Gly Arg Glu Phe Asp Leu Phe Phe Ser Ala Asp Thr Lys Tyr
65 70 75 80

Ala Lys Ala Ile Tyr Asp Asp Lys Asn Ala Leu Ile Lys Pro Lys Val
85 90 95

Tyr Val Leu Gly Val Leu Ala Leu Tyr Ser Leu Asp Glu Asn Leu Leu
100 105 110

Gln Gly Gly Val Glu Asn Leu Lys Glu Lys Ala Asn Lys Ile Thr His
115 120 125

Leu Ser Ile Ala Asn Pro Lys Val Ala Pro Tyr Gly Val Ala Ala Lys
130 135 140

Glu Val Leu Glu Asn Leu Gly Leu Asn Glu Leu Leu Lys Asp Lys Ile
145 150 155 160

Val Leu Gly Glu Asn Ile Ser Val Pro Val Leu His Val Asp Ser Lys
165 170 175

Sequence_Listing_0088562_015US0.TXT

Asn Ser Asp Ile Ala Ile Val Ala Tyr Ser Leu Val Ser Ser Ile Asn
180 185 190

His Pro Lys Gly Lys Ala Val Ile Ile Asp Ala Lys Tyr Phe Ser Pro
195 200 205

Leu Glu Gln Ser Tyr Val Ile Thr Lys Tyr Ala Lys Asp Lys Lys Leu
210 215 220

Ala Phe Glu Phe Asn Glu Phe Ile Gly Ser Ser Lys Ala Lys Glu Ile
225 230 235 240

Phe Lys Lys Tyr Gly Phe Ser Thr Pro
245

<210> 41
<211> 198
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:41 - Cj0334)
<400> 41

Met Ile Val Thr Lys Lys Ala Leu Asp Phe Thr Ala Pro Ala Val Leu
1 5 10 15

Gly Asn Asn Glu Ile Val Gln Asp Phe Asn Leu Tyr Lys Asn Ile Gly
20 25 30

Pro Lys Gly Ala Val Val Phe Phe Tyr Pro Lys Asp Phe Thr Phe Val
35 40 45

Cys Pro Ser Glu Ile Ile Ala Phe Asp Lys Arg Tyr Gln Glu Phe Lys
50 55 60

Asn Arg Gly Ile Glu Val Ile Gly Ile Ser Gly Asp Asn Glu Phe Ser
65 70 75 80

His Phe Ala Trp Lys Asn Thr Pro Val Asn Gln Gly Gly Ile Gly Gln
85 90 95

Val Lys Phe Pro Leu Val Ala Asp Leu Thr Lys Gln Ile Ala Arg Asn
100 105 110

Phe Asp Val Leu Tyr Ala Glu Ala Val Ala Leu Arg Gly Ser Phe Leu
115 120 125

Leu Asp Ala Asp Gly Thr Val Arg His Ala Val Val Asn Asp Leu Pro
130 135 140

Sequence_Listing_0088562_015US0.TXT

Leu Gly Arg Asn Ile Asp Glu Met Leu Arg Met Val Asp Thr Met Leu
145 150 155 160

Phe Thr Asn Glu His Gly Glu Val Cys Pro Ala Gly Trp Asn Lys Gly
165 170 175

Asp Glu Gly Met Lys Ala Asn Pro Lys Gly Val Ala Glu Tyr Leu Gly
180 185 190

Lys Asn Glu Ala Lys Leu
195

<210> 42
<211> 573
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:42 - Cj0415)

<400> 42

Met Ala Glu Val Leu Lys Lys Val Asp Val Val Thr Val Gly Ala Gly
1 5 10 15

Trp Thr Gly Gly Ile Val Ala Ala Glu Leu Thr Lys Ala Gly Leu Asn
20 25 30

Val Leu Ser Leu Glu Arg Gly His Met Gln Ser Thr Glu Asn Phe Asn
35 40 45

Tyr Ile His Asp Glu Trp Arg Tyr Gly Ile Asn Tyr Gly Leu Met Gln
50 55 60

Asp Cys Ser Lys Asp Thr Val Thr Phe Arg His Asp Pro Ser Gly Leu
65 70 75 80

Ala Leu Pro Tyr Arg Lys Met Gly Ser Phe Leu Leu Gly Asn Asn Val
85 90 95

Gly Gly Ala Gly Val His Trp Asn Gly Trp Thr Phe Arg Phe Met Pro
100 105 110

Tyr Asp Phe Glu Ile Gln Thr Leu Ser Lys Gln Arg Tyr Gly Asn Lys
115 120 125

Leu Gly Asn Asp Tyr Thr Leu Gln Asp Trp Gly Val Thr Tyr Lys Asp
130 135 140

Met Glu Pro Tyr Tyr Asp Arg Phe Glu Lys Thr Cys Gly Val Ser Gly
145 150 155 160

Glu Pro Asn Pro Leu Ala Glu Lys Met Gly Ala Phe Arg Ser Ser Pro

Sequence_Listing_0088562_015US0.TXT

165

170

175

Tyr Pro Gln Glu Pro Leu Glu Asn Thr Lys Met Leu Lys Arg Phe Glu
180 185 190

Ser Ala Ala Lys Ser Ser Asn Leu His Thr Tyr Arg Leu Pro Ala Ser
195 200 205

Asn Ser Lys Gly Gly Tyr Thr Asn Pro Asp Gly Gln Asp Leu Ala Pro
210 215 220

Cys Gln Tyr Cys Ala Tyr Cys Glu Arg Phe Gly Cys Glu Tyr Gly Ala
225 230 235 240

Lys Ala Ser Pro Leu Asn Thr Val Ile Pro Lys Ala Met Ser Thr Gly
245 250 255

Lys Tyr Thr Ile Arg Thr Tyr Ser Asn Val Thr Gln Ile Leu Lys Lys
260 265 270

Asp Gly Lys Val Thr Gly Val Lys Phe Val Asp Thr Arg Thr Met Lys
275 280 285

Glu Tyr Ile Gln Pro Ala Asp Ile Val Val Leu Thr Ser Tyr Met Phe
290 295 300

Asn Asn Ala Lys Leu Leu Met Val Ser Asn Ile Gly Glu Gln Tyr Asp
305 310 315 320

Pro Lys Thr Gly Lys Gly Thr Leu Gly Arg Asn Tyr Cys Tyr Gln Met
325 330 335

Asn Met Gly Thr Thr Ala Phe Phe Asp Glu Gln Phe Asn Thr Phe Met
340 345 350

Gly Ser Gly Ala Leu Gly Thr Thr Ser Asp Asp Phe Asn Gly Asp Asn
355 360 365

Phe Asp His Ser Lys Glu Lys Phe Leu His Gly Ala Met Ile Tyr Ser
370 375 380

Val Gln Leu Gly Thr Arg Pro Ile Gln Ser Ala Pro Leu Pro Ala Gly
385 390 395 400

Ala Pro Thr Trp Gly Ala Glu Phe Lys Lys Ala Leu Asn Tyr Asn Phe
405 410 415

Thr Arg Ala Ile Thr Val Gly Gly Gln Gly Ala Ser Leu Pro His Lys

Sequence_Listing_0088562_015US0.TXT

420

425

430

Asn Asn Tyr Leu Ser Leu Asp Pro Thr Tyr Lys Asp Ala Phe Gly Met
435 440 445

Pro Leu Leu Arg Leu Thr Tyr Asn Phe Thr Asp Gln Asp Arg Ala Leu
450 455 460

His Lys Phe Ile Thr Asp Lys Thr Ala Glu Val Ala Lys Arg Met Gln
465 470 475 480

Gly Val Lys Ser Ile Lys Lys Gly Ala Tyr Leu Lys Asp Tyr Ser Val
485 490 495

Val Pro Tyr Gln Ser Thr His Asn Thr Gly Gly Thr Thr Met Gly Ala
500 505 510

Asp Arg Glu Thr Ser Val Val Asn Thr Tyr Leu Gln His Trp Asp Ala
515 520 525

Asp Asn Leu Phe Val Val Gly Ala Gly Asn Phe Gln His Asn Ser Gly
530 535 540

Tyr Asn Pro Thr Asp Thr Val Gly Ala Leu Ala Tyr Arg Cys Ala Glu
545 550 555 560

Gly Ile Leu Lys Tyr His Lys Ser Gly Lys Ser Leu Ala
565 570

<210> 43
<211> 190
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:43 - Cj0420)

<220>
<221> MISC_FEATURE
<222> (70)..(70)
<223> X at position 70 is Val or Ala

<220>
<221> MISC_FEATURE
<222> (136)..(136)
<223> X at position 136 is Ala or Thr

<220>
<221> MISC_FEATURE
<222> (168)..(168)
<223> X at position 168 is Thr or Ala

<400> 43

Met Lys Lys Val Leu Leu Ser Ser Leu Val Ala Val Ser Leu Leu Ser
1 5 10 15

Sequence_Listing_0088562_015US0.TXT

Thr Gly Leu Phe Ala Lys Glu Tyr Thr Leu Asp Lys Ala His Thr Asp
20 25 30

Val Gly Phe Lys Ile Lys His Leu Gln Ile Ser Asn Val Lys Gly Asn
35 40 45

Phe Lys Asp Tyr Ser Ala Val Ile Asp Phe Asp Pro Ala Ser Ala Glu
50 55 60

Phe Lys Lys Leu Asp Xaa Thr Ile Lys Ile Ala Ser Val Asn Thr Glu
65 70 75 80

Asn Gln Thr Arg Asp Asn His Leu Gln Gln Asp Asp Phe Phe Lys Ala
85 90 95

Lys Lys Tyr Pro Asp Met Thr Phe Thr Met Lys Lys Tyr Glu Lys Ile
100 105 110

Asp Asn Glu Lys Gly Lys Met Thr Gly Thr Leu Thr Ile Ala Gly Val
115 120 125

Ser Lys Asp Ile Val Leu Asp Xaa Glu Ile Gly Gly Val Ala Lys Gly
130 135 140

Lys Asp Gly Lys Glu Lys Ile Gly Phe Ser Leu Asn Gly Lys Ile Lys
145 150 155 160

Arg Ser Asp Phe Lys Phe Ala Xaa Ser Thr Ser Thr Ile Thr Leu Ser
165 170 175

Asp Asp Ile Asn Leu Asn Ile Glu Val Glu Ala Asn Glu Lys
180 185 190

<210> 44
<211> 623
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:44 - Cj0759)
<400> 44

Met Ser Lys Val Ile Gly Ile Asp Leu Gly Thr Thr Asn Ser Cys Val
1 5 10 15

Ala Val Tyr Glu Arg Gly Glu Ser Lys Val Ile Pro Asn Lys Glu Gly
20 25 30

Lys Asn Thr Thr Pro Ser Val Val Ala Phe Thr Asp Lys Gly Glu Val
35 40 45

Sequence_Listing_0088562_015US0.TXT

Leu Val Gly Asp Ser Ala Lys Arg Gln Ala Val Thr Asn Pro Glu Lys
 50 55 60
 Thr Ile Tyr Ser Ile Lys Arg Ile Met Gly Leu Met Ile Asn Glu Asp
 65 70 75 80
 Ala Ala Lys Glu Ala Lys Asn Arg Leu Pro Tyr His Ile Thr Glu Arg
 85 90 95
 Asn Gly Ala Cys Ala Ile Glu Ile Ala Gly Lys Ile Tyr Thr Pro Gln
 100 105 110
 Glu Ile Ser Ala Lys Val Leu Met Lys Leu Lys Glu Asp Ala Glu Ala
 115 120 125
 Phe Leu Gly Glu Ser Val Thr Asp Ala Val Ile Thr Val Pro Ala Tyr
 130 135 140
 Phe Asn Asp Ala Gln Arg Lys Ala Thr Lys Glu Ala Gly Thr Ile Ala
 145 150 155 160
 Gly Leu Asn Val Leu Arg Ile Ile Asn Glu Pro Thr Ser Ala Ala Leu
 165 170 175
 Ala Tyr Gly Leu Asp Lys Lys Asp Ser Glu Lys Ile Val Val Tyr Asp
 180 185 190
 Leu Gly Gly Gly Thr Phe Asp Val Thr Val Leu Glu Thr Gly Asp Asn
 195 200 205
 Val Val Glu Val Leu Ala Thr Gly Gly Asn Ala Phe Leu Gly Gly Asp
 210 215 220
 Asp Phe Asp Asn Lys Leu Ile Asp Phe Leu Ala Asn Glu Phe Lys Asp
 225 230 235 240
 Glu Thr Gly Ile Asp Leu Lys Asn Asp Val Met Ala Leu Gln Arg Leu
 245 250 255
 Lys Glu Ala Ala Glu Asn Ala Lys Lys Glu Leu Ser Ser Ala Asn Glu
 260 265 270
 Thr Glu Ile Asn Leu Pro Phe Ile Thr Ala Asp Ala Ser Gly Pro Lys
 275 280 285
 His Leu Val Lys Lys Leu Thr Arg Ala Lys Phe Glu Gly Met Ile Asp
 290 295 300

Sequence_Listing_0088562_015US0.TXT

Ser Leu Val Ala Glu Thr Ile Thr Lys Ile Asn Glu Val Val Ser Asp
 305 310 315 320
 Ala Gly Leu Lys Lys Asp Glu Ile Lys Glu Ile Val Met Val Gly Gly
 325 330 335
 Ser Thr Arg Val Pro Leu Val Gln Glu Glu Val Lys Lys Ala Phe Asn
 340 345 350
 Lys Asp Leu Asn Lys Ser Val Asn Pro Asp Glu Val Val Ala Ile Gly
 355 360 365
 Ala Ala Ile Gln Gly Ala Val Ile Lys Gly Asp Val Lys Asp Val Leu
 370 375 380
 Leu Leu Asp Val Thr Pro Leu Ser Leu Gly Ile Glu Thr Leu Gly Gly
 385 390 395 400
 Val Met Thr Lys Ile Ile Glu Lys Gly Thr Thr Ile Pro Thr Lys Lys
 405 410 415
 Glu Gln Val Phe Ser Thr Ala Glu Asp Asn Gln Ser Ala Val Thr Ile
 420 425 430
 Asn Val Leu Gln Gly Glu Arg Glu Phe Ser Arg Asp Asn Lys Ser Leu
 435 440 445
 Gly Asn Phe Asn Leu Glu Gly Ile Pro Pro Ala Pro Arg Gly Met Pro
 450 455 460
 Gln Ile Glu Val Thr Phe Asp Ile Asp Ala Asn Gly Ile Leu Thr Val
 465 470 475 480
 Ser Ala Lys Asp Lys Ala Thr Gly Lys Ala Gln Glu Ile Lys Ile Thr
 485 490 495
 Gly Ser Ser Gly Leu Ser Glu Glu Glu Ile Asn Asn Met Val Lys Asp
 500 505 510
 Ala Glu Leu His Lys Glu Glu Asp Lys Lys Arg Lys Glu Ala Val Asp
 515 520 525
 Ala Arg Asn Ala Ala Asp Ser Leu Ala His Gln Val Glu Lys Ser Leu
 530 535 540
 Ser Glu Leu Gly Glu Lys Val Ala Ala Ala Asp Lys Glu Asn Ile Gln
 545 550 555 560

Sequence_Listing_0088562_015US0.TXT

Lys Ala Leu Asp Asp Leu Arg Glu Thr Leu Lys Asn Gln Asn Ala Ser
565 570 575

Lys Glu Glu Ile Glu Ser Lys Met Lys Ala Leu Ser Glu Val Ser His
580 585 590

Lys Leu Ala Glu Asn Met Tyr Lys Lys Asp Glu Pro Asn Thr Ala Asn
595 600 605

Asp Lys Lys Lys Lys Asp Asp Asp Val Ile Asp Ala Glu Val Glu
610 615 620

<210> 45

<211> 256

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:45 - Cj0771c)

<400> 45

Met Asn Leu Phe Lys Ile Ile Ile Leu Ala Cys Ile Leu Asn Leu Ser
1 5 10 15

Ser Leu Phe Ala Gln Asn Ile Thr Ile Gly Ala Thr Pro Asn Pro Phe
20 25 30

Gly Ser Leu Leu Glu Leu Met Lys Asp Asp Phe Lys Asn Lys Gly Tyr
35 40 45

Glu Leu Lys Ile Val Glu Phe Ser Asp Tyr Ile Leu Pro Asn Arg Ala
50 55 60

Leu Glu Glu Lys Glu Leu Asp Ala Asn Leu Tyr Gln His Lys Pro Phe
65 70 75 80

Leu Glu Glu Tyr Asn Leu Lys Lys Gly Ser Asn Leu Ile Ala Thr Thr
85 90 95

Pro Val Leu Ile Ala Pro Val Gly Val Tyr Ser Lys Lys Ile Lys Asn
100 105 110

Leu Glu Asn Leu Lys Glu Gly Ala Arg Val Ala Ile Pro Asn Asp Ala
115 120 125

Thr Asn Glu Ser Arg Ala Leu Glu Leu Leu Glu Lys Ala Lys Leu Ile
130 135 140

Glu Leu Asn Lys Asn Thr Leu Lys Thr Pro Leu Asp Ile Asn Lys Asn
145 150 155 160

Sequence_Listing_0088562_015US0.TXT

Pro Lys Lys Leu Lys Phe Ile Glu Leu Lys Ala Ala Gln Leu Pro Arg
165 170 175

Ala Leu Asp Asp Val Asp Ile Ala Ile Ile Asn Ser Asn Phe Ala Leu
180 185 190

Gly Ala Gly Leu Asn Pro Ser Lys Asp Thr Ile Phe Arg Glu Asp Lys
195 200 205

Asn Ser Pro Tyr Val Asn Tyr Val Val Val Arg Ser Glu Gly Lys Asn
210 215 220

Ser Glu Lys Thr Lys Val Ile Asp Glu Ile Leu Arg Ser Asp Lys Phe
225 230 235 240

Lys Ala Ile Ile Asn Glu His Tyr Lys Asp Ile Leu Ile Pro Ala Phe
245 250 255

<210> 46

<211> 257

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:46 - Cj0772c)

<400> 46

Met Lys Ile Lys Ser Leu Phe Ile Ala Ser Ile Leu Thr Leu Ser Leu
1 5 10 15

Asn Ala Asn Ala Leu Glu Thr Ile Thr Val Ala Ala Thr Pro Val Pro
20 25 30

His Ala Glu Ile Leu Glu Gln Val Lys Pro Asp Leu Glu Lys Gln Gly
35 40 45

Tyr Lys Leu Glu Ile Lys Glu Phe Thr Asp Tyr Val Leu Pro Asn Leu
50 55 60

Ala Val Asp Asn Gly Glu Ala Asp Ala Asn Phe Phe Gln His Thr Pro
65 70 75 80

Tyr Leu Glu Glu Phe Asn Lys Asn Lys Gly Thr Lys Leu Ile Lys Val
85 90 95

Ala Ala Ile His Ile Glu Pro Met Ala Val Tyr Ser Lys Lys Tyr Lys
100 105 110

Ser Leu Asp Asp Ile Lys Glu Gly Val Lys Ile Ala Ile Pro Asn Asp
115 120 125

Pro Thr Asn Glu Ser Arg Ala Leu Asp Ile Ile Ala Lys Lys Gly Leu

130

135

140

Val Lys Phe Lys Asp Lys Ala Leu Lys Thr Pro Leu Asp Ile Ile Asp
 145 150 155 160

Asn Pro Lys Lys Ile Lys Phe Val Glu Leu Lys Pro Ala Gln Leu Pro
 165 170 175

Arg Ala Leu Asn Asp Val Asp Phe Ala Val Ile Asn Ser Asn Tyr Ala
 180 185 190

Leu Ser Ala Asn Leu Asn Pro Ala Lys Asp Ser Val Phe Ile Glu Asp
 195 200 205

Lys Glu Ser Pro Tyr Ala Asn Ile Leu Val Val Arg Val Gly His Glu
 210 215 220

Asn Asp Pro Lys Ile Lys Ala Leu Ile Gln Ala Leu Gln Ser Asp Lys
 225 230 235 240

Ile Lys Gln Phe Ile Ile Glu Lys Tyr Asn Gly Ser Val Leu Pro Ala
 245 250 255

Phe

<210> 47

<211> 213

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:47 - Cj0872)

<400> 47

Met Arg Asn Phe Phe Cys Lys Phe Val Leu Ala Leu Val Phe Tyr Ser
 1 5 10 15

Ser Phe Ala Leu Ala Asn Asn Ser Phe Ile Thr Leu Asn Pro Ser Leu
 20 25 30

Pro Ser Ser Glu Asn Ser Val Ile Glu Ala Phe Ser Tyr Lys Cys Ile
 35 40 45

His Cys Tyr Asn His His Lys Phe Gly Thr Leu Glu Lys Leu Arg Glu
 50 55 60

Ala Phe Pro Asn Leu His Phe Lys Leu Tyr Pro Val Ser Leu Met Asn
 65 70 75 80

Gly Glu Phe Ser Lys Glu Met Asn Glu Leu Phe Thr Phe Ala Gln Tyr
 85 90 95

Sequence_Listing_0088562_015US0.TXT

Lys Asp Glu Gln Asn Gly Lys Asp Ala Ser Tyr Ser Asp Ser Leu Ser
100 105 110

His Lys Leu Ala Asp Val Tyr Phe Val Ser Tyr Phe Leu Asn Lys Gln
115 120 125

Arg Asn Phe Ser Asn Leu Asp Glu Phe Tyr Asp Ile Gly Leu Lys Ala
130 135 140

Met Asn Val Asn Lys Asn Glu Val Leu Asn Phe Leu Asn Thr Pro Lys
145 150 155 160

Ala Lys Glu Ile Leu Ser Glu Phe Gln Arg Ala Asn Asp Ile Ala Lys
165 170 175

Thr Tyr Gly Thr Pro Ala Phe Val Val Asn Gly Lys Tyr Gln Ile Asn
180 185 190

Pro Ser Ala Ile Asn Ser Met Gln Asp Leu Glu Asp Leu Val Lys Lys
195 200 205

Leu Ser Asn Met Lys
210

<210> 48

<211> 130

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:48 - Cj1118c)

<400> 48

Met Lys Leu Leu Val Val Asp Asp Ser Ser Thr Met Arg Arg Ile Ile
1 5 10 15

Lys Asn Thr Leu Thr Arg Leu Gly His Asp Asp Val Leu Glu Ala Glu
20 25 30

His Gly Val Glu Ala Trp Asp Leu Leu Thr Lys Asn Glu Asp Val Lys
35 40 45

Val Leu Ile Thr Asp Trp Asn Met Pro Glu Met Asn Gly Leu Glu Leu
50 55 60

Val Lys Lys Val Arg Ala Glu Lys Lys Tyr Glu Asp Met Pro Ile Ile
65 70 75 80

Met Val Thr Thr Glu Gly Gly Lys Ala Glu Val Ile Thr Ala Leu Lys
85 90 95

Sequence_Listing_0088562_015US0.TXT

Ala Gly Val Asn Asn Tyr Ile Val Lys Pro Phe Thr Pro Gln Val Leu
100 105 110

Lys Glu Lys Leu Glu Asp Val Leu Gly Thr Gly Ser Gly Glu Gly Ala
115 120 125

Ala Glu
130

<210> 49

<211> 472

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:49 - Cj1228c)

<400> 49

Met Lys Lys Ile Phe Leu Ser Leu Ser Leu Ala Ser Ala Leu Phe Ala
1 5 10 15

Ala Ser Ile Asn Phe Asn Glu Ser Thr Ala Thr Ala Asn Arg Val Asn
20 25 30

Pro Ala Ala Gly Asn Ala Val Leu Ser Tyr His Asp Ser Ile Lys Asp
35 40 45

Ala Lys Lys Ser Val Val Asn Ile Ser Thr Ser Lys Thr Ile Thr Arg
50 55 60

Ala Asn Arg Pro Ser Pro Leu Asp Asp Phe Phe Asn Asp Pro Tyr Phe
65 70 75 80

Lys Gln Phe Phe Asp Phe Asp Phe Ser Gln Arg Lys Gly Lys Asn Asp
85 90 95

Lys Glu Val Val Ser Ser Leu Gly Ser Gly Val Ile Ile Ser Lys Asp
100 105 110

Gly Tyr Ile Val Thr Asn Asn His Val Val Asp Asp Ala Asp Thr Ile
115 120 125

Thr Val Asn Leu Pro Gly Ser Asp Ile Glu Tyr Lys Ala Lys Leu Ile
130 135 140

Gly Lys Asp Pro Lys Thr Asp Leu Ala Val Ile Lys Ile Glu Ala Asn
145 150 155 160

Asn Leu Ser Ala Ile Thr Phe Thr Asn Ser Asp Asp Leu Met Glu Gly
165 170 175

Sequence_Listing_0088562_015US0.TXT

Asp Val Val Phe Ala Leu Gly Asn Pro Phe Gly Val Gly Phe Ser Val
 180 185 190
 Thr Ser Gly Ile Ile Ser Ala Leu Asn Lys Asp Asn Ile Gly Leu Asn
 195 200 205
 Gln Tyr Glu Asn Phe Ile Gln Thr Asp Ala Ser Ile Asn Pro Gly Asn
 210 215 220
 Ser Gly Gly Ala Leu Val Asp Ser Arg Gly Tyr Leu Val Gly Ile Asn
 225 230 235 240
 Ser Ala Ile Leu Ser Arg Gly Gly Gly Asn Asn Gly Ile Gly Phe Ala
 245 250 255
 Ile Pro Ser Asn Met Val Lys Asp Ile Ala Lys Lys Leu Ile Glu Lys
 260 265 270
 Gly Lys Ile Asp Arg Gly Phe Leu Gly Val Thr Ile Leu Ala Leu Gln
 275 280 285
 Gly Asp Thr Lys Lys Ala Tyr Lys Asn Gln Glu Gly Ala Leu Ile Thr
 290 295 300
 Asp Val Gln Lys Gly Ser Ser Ala Asp Glu Ala Gly Leu Lys Arg Gly
 305 310 315 320
 Asp Leu Val Thr Lys Val Asn Asp Lys Val Ile Lys Ser Pro Ile Asp
 325 330 335
 Leu Lys Asn Tyr Ile Gly Thr Leu Glu Ile Gly Gln Lys Ile Ser Leu
 340 345 350
 Ser Tyr Glu Arg Asp Gly Glu Asn Lys Gln Ala Ser Phe Ile Leu Lys
 355 360 365
 Gly Glu Lys Glu Asn Pro Lys Gly Val Gln Ser Asp Leu Ile Asp Gly
 370 375 380
 Leu Ser Leu Arg Asn Leu Asp Pro Arg Leu Lys Asp Arg Leu Gln Ile
 385 390 395 400
 Pro Lys Asp Val Asn Gly Val Leu Val Asp Ser Val Lys Glu Lys Ser
 405 410 415
 Lys Gly Lys Asn Ser Gly Phe Gln Glu Gly Asp Ile Ile Ile Gly Val
 420 425 430

Sequence_Listing_0088562_015US0.TXT

Gly Gln Ser Glu Ile Lys Asn Leu Lys Asp Leu Glu Gln Ala Leu Lys
435 440 445

Gln Val Asn Lys Lys Glu Phe Thr Lys Val Trp Val Tyr Arg Asn Gly
450 455 460

Phe Ala Thr Leu Leu Val Leu Lys
465 470

<210> 50

<211> 511

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:50 - Cj1584c)

<400> 50

Met Leu Arg Trp Phe Val Leu Leu Phe Leu Leu Phe Leu Asn Leu Glu
1 5 10 15

Ala Lys Ile Pro Lys Asp Thr Leu Ile Ile Ala Val Glu Asn Glu Ile
20 25 30

Ala Arg Ile Asn Pro Ala Tyr Ser Glu Asp His Asp Ala Val Ile Asn
35 40 45

Leu Val Phe Ser Gly Leu Thr Arg Phe Asp Glu Asn Met Ser Leu Lys
50 55 60

Pro Asp Leu Ala Lys Ser Trp Asp Ile Ser Lys Asp Gly Leu Val Tyr
65 70 75 80

Asp Ile Phe Leu Arg Asp Asp Val Leu Trp His Asp Gly Val Lys Phe
85 90 95

Ser Ala Asp Asp Val Lys Phe Ser Ile Glu Ala Phe Lys Asn Pro Lys
100 105 110

Asn Asn Ser Ser Ile Tyr Val Asn Phe Glu Asp Ile Lys Ser Val Glu
115 120 125

Ile Leu Asn Pro Ser His Val Lys Ile Thr Leu Phe Lys Pro Tyr Pro
130 135 140

Ala Phe Leu Asp Ala Leu Ser Ile Gly Met Leu Pro Lys His Leu Leu
145 150 155 160

Glu Asn Glu Asn Leu Asn Thr Ser Ser Phe Asn Gln Asn Pro Ile Gly
165 170 175

Thr Gly Pro Tyr Lys Phe Val Lys Trp Lys Lys Gly Glu Tyr Val Glu

190

Phe	Lys	Ala 195	Asn	Glu	His	Phe	Tyr 200	Leu	Asp	Lys	Val	Lys 205	Thr	Pro	Arg
Leu	Ile 210	Ile	Lys	His	Ile	Phe 215	Asp	Pro	Ser	Ile	Ala 220	Ser	Ala	Glu	Leu
Lys 225	Asn	Gly	Lys	Ile	Asp 230	Ala	Ala	Leu	Ile	Asp 235	Val	Ser	Leu	Leu	Asn 240
Ile	Phe	Lys	Asn	Asp 245	Glu	Asn	Phe	Gly	Ile 250	Leu	Arg	Glu	Lys	Ser 255	Ala
Asp	Tyr	Arg	Ala 260	Leu	Met	Phe	Asn	Leu 265	Asp	Asn	Glu	Phe	Leu 270	Lys	Asp
Leu	Lys	Val 275	Arg	Gln	Ala	Leu	Asn 280	Tyr	Ala	Val	Asp	Lys 285	Glu	Ser	Ile
Val	Lys 290	Asn	Leu	Leu	His	Asp 295	Tyr	Ala	Phe	Val	Ala 300	Asn	His	Pro	Leu
Glu 305	Arg	Ser	Trp	Ala	Asn 310	Ser	Lys	Asn	Phe	Lys 315	Ile	Tyr	Lys	Tyr	Asp 320
Pro	Lys	Lys	Ala	Glu 325	Asp	Leu	Leu	Val	Ser 330	Ala	Gly	Phe	Lys	Lys 335	Asn
Lys	Asp	Gly	Asn 340	Phe	Glu	Lys	Asp	Gly 345	Lys	Ile	Leu	Glu	Phe 350	Glu	Ile
Trp	Ala	Met 355	Ser	Asn	Asp	Pro	Leu 360	Arg	Val	Ser	Leu	Ala 365	Gly	Ile	Leu
Gln	Ser 370	Glu	Phe	Arg	Lys	Ile 375	Gly	Val	Val	Ser	Lys 380	Val	Val	Ala	Lys
Pro 385	Ala	Gly	Ser	Phe	Asp 390	Tyr	Ser	Lys	Val	Asp 395	Ser	Phe	Leu	Ile	Gly 400
Trp	Gly	Ser	Pro	Leu 405	Asp	Pro	Asp	Phe	His 410	Thr	Phe	Arg	Val	Phe 415	Glu
Ser	Ser	Gln	Asp 420	Ser	Ala	Leu	Asn	Asp 425	Glu	Gly	Trp	Asn	Phe 430	Gly	His
Tyr	His	Asp	Lys	Lys	Val	Asp	Ile	Ala	Leu	Gln	Lys	Ala	Arg	Asn	Thr

Sequence_Listing_0088562_015US0.TXT

435

440

445

Ser Asn Leu Glu Glu Arg Lys Lys Tyr Tyr Lys Asp Phe Ile Asp Ala
 450 455 460

Leu Tyr Glu Asn Pro Pro Phe Ile Phe Leu Ala Tyr Leu Asp Phe Ala
 465 470 475 480

Leu Val Tyr Asn Lys Asp Leu Lys Gly Ile Lys Thr Arg Thr Leu Gly
 485 490 495

His His Gly Val Gly Phe Thr Trp Asn Val Tyr Glu Trp Ser Lys
 500 505 510

<210> 51

<211> 268

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:51 - Cj1617)

<400> 51

Met Lys Lys Ile Leu Ile Ile Met Ser Leu Phe Leu Ile Ala Leu Asn
 1 5 10 15

Ala Lys Glu Arg Leu Val Val Leu Asp Pro Ala Ser Ile Glu Thr Leu
 20 25 30

Phe Met Leu Lys Ala Glu Asp Gln Ile Val Gly Ile Ala Thr Leu Gln
 35 40 45

His Ser Asn Ile Tyr Pro Lys Asp Gln Thr Ser Lys Leu Thr Ser Val
 50 55 60

Gly Thr Phe Ser Asn Pro Ser Leu Glu Lys Ile Val Ala Leu Lys Pro
 65 70 75 80

Ser Leu Val Ile Leu Ser Ser Tyr Ser Leu Asn Leu Glu Glu Gly Leu
 85 90 95

Lys Asn Phe Gly Ile Lys Ser Ile Asn Leu Lys Ala Glu Arg Leu Glu
 100 105 110

Asp Ile Thr Lys Asn Ile Thr Thr Leu Gly Gln Ile Thr Lys Lys Glu
 115 120 125

Lys Glu Ala Glu Leu Leu Lys Gln Glu Phe Asn Gln Lys Phe Lys Lys
 130 135 140

Leu Ser Asp Lys Pro Leu Asn Lys Ser Ala Ile Tyr Leu Tyr Ser Ser
 145 150 155 160

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Asn Pro Leu Met Ala Phe Asn Asp Asn Ser Leu Ile Ala Asp Ile Leu
165 170 175

Arg Leu Ile Gly Ile Lys Asn Leu Ser Pro Gln Ser Gln Ile Ser Arg
180 185 190

Pro Val Ile Ser Ala Glu Tyr Ile Leu Lys Gln Asn Pro Asp Ile Leu
195 200 205

Ile Leu Gly Ile Asn Ala Lys Asn Asn Leu Leu Asp Thr Asn Ala Leu
210 215 220

Leu Lys Asn Thr Lys Ala Val Lys Thr Gly Ser Ile Tyr Phe Asn Lys
225 230 235 240

Asp Thr Pro Ile Leu Leu Arg Leu Ser Pro Lys Ile Ile Asp Arg Ile
245 250 255

Gln Glu Phe Lys Thr Lys Leu Glu Asn Asn Asn Phe
260 265

<210> 52

<211> 33

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:52 - fragment of Cj0092)

<400> 52

Thr Gln Gln Asp Ile Asn Thr Gln Asn Glu Met Ser Asp Ala Ser Thr
1 5 10 15

Lys Asp Ile Thr Pro Lys Ser Ile Glu Asp Phe Phe Glu Glu Phe Ala
20 25 30

Asp

<210> 53

<211> 25

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:53 - fragment of Cj0092)

<400> 53

Gly Ile Thr Lys Asp Gly Lys Thr Phe Tyr Thr Gly Lys Ser Thr Val
1 5 10 15

Ala Val Asn Asp Thr Asp Pro Gln Phe
20 25

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<210> 54
 <211> 36
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:54 - fragment of Cj0092)

<400> 54

Arg Ile Ala Thr Ser Lys Ile Gln Asn Tyr Glu Ala Asp Asn Ser Thr
 1 5 10 15

Asn Ala Lys Glu Phe Asp Glu Leu Pro Lys Gly Asp Lys Val Asp Gln
 20 25 30

Ile Leu Asn Lys
 35

<210> 55
 <211> 36
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:55 - fragment of Cj0092)

<400> 55

Gln Leu Asp Lys Ala Leu Lys Asp Leu Gly Ile Asp Thr Asn Ser Leu
 1 5 10 15

Ser Glu Asp Arg Lys Lys Thr Leu Leu Lys Gln Glu Phe Leu Asn Lys
 20 25 30

Thr Met Thr Asn
 35

<210> 56
 <211> 28
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:56 - fragment of Cj0092)

<400> 56

Thr Ile Val Thr Gln Arg Arg Gly Glu Tyr Asp Val Gly Val Val Ala
 1 5 10 15

Val Ile Ser Asn Lys Thr Arg Gln Leu Ala Lys Asp
 20 25

<210> 57
 <211> 26
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:57 - fragment of Cj0092)

<400> 57

Ala Ile Ser Glu Tyr Leu Pro Lys Asp Thr Lys Gly Phe Leu Asn Glu
 1 5 10 15

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Tyr Gly Ile Arg Leu Val Tyr Asp Glu Asn
20 25

<210> 58
<211> 18
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:58 - fragment of Cj0092)
<400> 58

Asp Pro Ser Asn Ala Lys Lys Thr Asn Ile Leu Glu Asp Arg Ala Lys
1 5 10 15

Glu Thr

<210> 59
<211> 17
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:59 - fragment of Cj0092)
<400> 59

Leu Ser Leu Lys Asp Glu Arg Thr Thr Gly Asp Thr Tyr Glu Glu Ile
1 5 10 15

Ile

<210> 60
<211> 15
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:60 - fragment of Cj0092)
<400> 60

Val Asn Asp Ser Ser Thr Gln Glu Gln Thr Gln Asn Ile Thr Asn
1 5 10 15

<210> 61
<211> 12
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:61 - fragment of Cj0092)
<400> 61

Thr Leu Lys Lys Trp Ser Tyr Thr Ser Glu Asn Gly
1 5 10

<210> 62
<211> 33
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:62 - fragment of Cj0092)
<400> 62

Tyr Ser Tyr Glu Asn Leu Ala Asn Thr Asn Glu Ala Leu Asn Ser Lys

1 5 10 15

Ser

1

5

10

15

Glu His Gly His Phe Asp Pro His Thr Trp Leu
 20 25

<210> 67

<211> 20

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:67 - fragment of Cj0143c)

<400> 67

Asp Thr Leu Ile Gln Lys Tyr Pro Gln Asn Glu Asn Leu Tyr Lys Glu
 1 5 10 15

Asn Leu Asp Lys
 20

<210> 68

<211> 10

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:68 - fragment of Cj0143c)

<400> 68

Ser Lys Leu Glu Lys Leu Lys Asn Arg Glu
 1 5 10

<210> 69

<211> 8

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:69 - fragment of Cj0143c)

<400> 69

Tyr Phe Ala Lys Arg Tyr Asn Leu
 1 5

<210> 70

<211> 11

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:70 - fragment of Cj0143c)

<400> 70

Gly Lys Glu Pro Lys Ser Lys Asp Leu Gln Lys
 1 5 10

<210> 71

<211> 8

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:71 - fragment of Cj0143c)

<400> 71

Leu Met Lys Asp Lys Asn Leu Lys
 1 5

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<210> 72
 <211> 22
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:72 - fragment of Cj0143c)
 <400> 72

Gln Asn Gly Phe Pro Glu Asn Ala Ala Lys Thr Leu Ala Lys Glu Cys
 1 5 10 15

Asp Ala Lys Ile Tyr Lys
 20

<210> 73
 <211> 18
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:73 - fragment of Cj0143c)
 <400> 73

Asp His Leu Ser Tyr Asp Trp Glu Asn Glu Leu Leu Lys Thr Ala Asp
 1 5 10 15

Ala Phe

<210> 74
 <211> 23
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:74 - fragment of Cj0420)
 <400> 74

Phe Ala Lys Glu Tyr Thr Leu Asp Lys Ala His Thr Asp Val Gly Phe
 1 5 10 15

Lys Ile Lys His Leu Gln Ile
 20

<210> 75
 <211> 28
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:75 - fragment of Cj0420)
 <400> 75

Val Lys Gly Asn Phe Lys Asp Tyr Ser Ala Val Ile Asp Phe Asp Pro
 1 5 10 15

Ala Ser Ala Glu Phe Lys Lys Leu Asp Val Thr Ile
 20 25

<210> 76
 <211> 19

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<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:76 - fragment of Cj0420)

<400> 76

Ser Val Asn Thr Glu Asn Gln Thr Arg Asp Asn His Leu Gln Gln Asp
1 5 10 15

Asp Phe Phe

<210> 77
<211> 15
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:77 - fragment of Cj0420)

<400> 77

Asp Phe Phe Lys Ala Lys Lys Tyr Pro Asp Met Thr Phe Thr Met
1 5 10 15

<210> 78
<211> 18
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:78 - fragment of Cj0420)

<400> 78

Thr Phe Thr Met Lys Lys Tyr Glu Lys Ile Asp Asn Glu Lys Gly Lys
1 5 10 15

Met Thr

<210> 79
<211> 14
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:79 - fragment of Cj0420)

<400> 79

Gly Val Ala Lys Gly Lys Asp Gly Lys Glu Lys Ile Gly Phe
1 5 10

<210> 80
<211> 15
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:80 - fragment of Cj0420)

<400> 80

Leu Asn Gly Lys Ile Lys Arg Ser Asp Phe Lys Phe Ala Thr Ser
1 5 10 15

<210> 81
<211> 7
<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:81 - fragment of Cj0420)

<400> 81

Glu Val Glu Ala Asn Glu Lys
1 5

<210> 82

<211> 12

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:82 - fragment of Cj0715)

<400> 82

Leu Ser Ala Thr Glu Tyr Gln Leu Ser Thr His Val
1 5 10

<210> 83

<211> 16

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:83 - fragment of Cj0715)

<400> 83

Ile Thr Ser Gly Gln Pro Ala Pro Lys Val Lys Val Glu Leu Tyr Lys
1 5 10 15

<210> 84

<211> 22

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:84 - fragment of Cj0715)

<400> 84

Leu Glu Ala Asn Gln Gln Trp Lys Lys Val Ser Glu Glu Phe Thr Glu
1 5 10 15

Glu Asn Gly Arg Ile Gly
20

<210> 85

<211> 13

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:85 - fragment of Cj0715)

<400> 85

Leu Leu Pro Tyr Glu Lys Ala Glu Asn Arg Ala Phe Gly
1 5 10

<210> 86

<211> 16

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:86- fragment of Cj0715)

<400> 86

Lys Phe Phe Thr Lys Asp Tyr Tyr Thr Ser His Lys Ile Asn Thr Phe

1

5

10

15

<210> 87

<211> 15

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:87 - fragment of Cj0715)

<400> 87

Ser Phe Glu Leu Ser Lys Asp Gln Lys His Tyr His Val Pro Ile
 1 5 10 15

<210> 88

<211> 9

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:88 - fragment of Cj0715)

<400> 88

Phe Gly Tyr Ser Thr Tyr Arg Gly Ser
 1 5

<210> 89

<211> 24

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:89 - fragment of Cj0772c)

<400> 89

Ile Leu Glu Gln Val Lys Pro Asp Leu Glu Lys Gln Gly Tyr Lys Leu
 1 5 10 15

Glu Ile Lys Glu Phe Thr Asp Tyr
 20

<210> 90

<211> 23

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:90 - fragment of Cj0772c)

<400> 90

Gly Glu Ala Asp Ala Asn Phe Phe Gln His Thr Pro Tyr Leu Glu Glu
 1 5 10 15

Phe Asn Lys Asn Lys Gly Thr
 20

<210> 91

<211> 15

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:91 - fragment of Cj0772c)

<400> 91

Ala Val Tyr Ser Lys Lys Tyr Lys Ser Leu Asp Asp Ile Lys Glu
 1 5 10 15

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<210> 92
 <211> 12
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:92 - fragment of Cj0772c)
 <400> 92

Ile Pro Asn Asp Pro Thr Asn Glu Ser Arg Ala Leu
 1 5 10

<210> 93
 <211> 39
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:93 - fragment of Cj0772c)
 <400> 93

Lys Gly Leu Val Lys Phe Lys Asp Lys Ala Leu Lys Thr Pro Leu Asp
 1 5 10 15

Ile Ile Asp Asn Pro Lys Lys Ile Lys Phe Val Glu Leu Lys Pro Ala
 20 25 30

Gln Leu Pro Arg Ala Leu Asn
 35

<210> 94
 <211> 21
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:94 - fragment of Cj0772c)
 <400> 94

Ala Asn Leu Asn Pro Ala Lys Asp Ser Val Phe Ile Glu Asp Lys Glu
 1 5 10 15

Ser Pro Tyr Ala Asn
 20

<210> 95
 <211> 29
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:95 - fragment of Cj0772c)
 <400> 95

Gly His Glu Asn Asp Pro Lys Ile Lys Ala Leu Ile Gln Ala Leu Gln
 1 5 10 15

Ser Asp Lys Ile Lys Gln Phe Ile Ile Glu Lys Tyr Asn
 20 25

<210> 96
 <211> 31

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<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:96 - fragment of Cj1018c)

<400> 96

Asn Gly Asp Lys Val Ser Leu Ala Ile Ile Asp Thr Lys Gly Asp Lys
1 5 10 15

Leu Glu Ser Ser Ser Gly Ala Asn Arg Leu Val Ser Gln Asp Lys
20 25 30

<210> 97

<211> 30

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:97 - fragment of Cj1018c)

<400> 97

Val Ala Glu Asp Asn Lys Ile Pro Leu Ile Ala Pro Ala Ala Thr Gly
1 5 10 15

Asp Arg Leu Leu Asp Lys Lys Ile Tyr Ser Ser Arg Val Cys
20 25 30

<210> 98

<211> 39

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:98 - fragment of Cj1018c)

<400> 98

Tyr Val Phe Ser Lys Leu Asn Tyr Lys Ser Ala Val Ile Val Val Asp
1 5 10 15

Gln Ser Thr Asp Tyr Ser Leu Gly Leu Ala Lys Ala Phe Glu Lys Gln
20 25 30

Tyr Lys Ser Asn Gly Gly Gln
35

<210> 99

<211> 41

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:99 - fragment of Cj1018c)

<400> 99

Asn Ser Gly Asp Lys Asp Phe Arg Ala Ile Val Ala Gln Val Lys Ser
1 5 10 15

Leu Asn Pro Glu Phe Ile Phe Leu Pro Leu Tyr Tyr Ser Glu Ala Ser
20 25 30

Leu Phe Ala Arg Gln Ser Lys Leu Ala
35 40

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<210> 100
 <211> 41
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:100 - fragment of Cj1018c)
 <400> 100

Gly Tyr Ile Phe Thr Asp Ser Phe Asp Ala Asn Asn Pro Thr Thr Lys
 1 5 10 15

Leu Ser Lys Glu Phe Ile Ser Val Tyr Glu Lys Ala Lys Gly Thr Lys
 20 25 30

Glu Val Pro Asn Phe Ser Ala Met Gly
 35 40

<210> 101
 <211> 15
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:101 - fragment of Cj1018c)
 <400> 101

Val Asn Glu Lys Ile His Gln Thr Lys Asn Tyr Gln Gly Val Ser
 1 5 10 15

<210> 102
 <211> 26
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:102 - fragment of Cj1018c)
 <400> 102

Gln Thr Gly Asn Ala Thr Arg Ser Val Val Val Lys Glu Ile Lys Asn
 1 5 10 15

Gln Lys Gln Asn Tyr Lys Asp Ile Ile Asn
 20 25

<210> 103
 <211> 14
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:103 - fragment of Cj1380)
 <400> 103

Glu Leu Asn Gly Gln Lys Gln Glu Asn Ile Leu Phe Thr Lys
 1 5 10

<210> 104
 <211> 31
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:104 - fragment of Cj1380)
 <400> 104

Sequence_Listing_0088562_015US0.TXT

Ser Tyr Ala Gln Glu Tyr Glu Met Lys Lys Phe Gln Glu Ala Arg Glu
1 5 10 15

Asn Phe Thr Lys Asn Ala Lys Ala Val Ala Gln Lys Glu Thr Met
20 25 30

<210> 105
<211> 12
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:105 - fragment of Cj1380)
<400> 105

Val Ile Ala Leu Gly Asp Lys Asn Lys Pro Ala Ile
1 5 10

<210> 106
<211> 14
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:106 - fragment of Cj1380)
<400> 106

His Leu Ala Gln Ile Asp Asp Glu Leu Lys Asn Tyr Gln Val
1 5 10

<210> 107
<211> 16
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:107 - fragment of Cj1380)
<400> 107

Tyr Lys Glu Ala Lys Lys Ala Lys Asn Asp Lys Glu Lys Ile Ala Ile
1 5 10 15

<210> 108
<211> 33
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:108 - fragment of Cj1380)
<400> 108

Leu Asn Lys Tyr Tyr Asp Ala Asn Ile Lys Asn Tyr Pro Lys Val Ser
1 5 10 15

Asp Ala Glu Leu Lys Glu Val Phe Ser Leu Tyr Glu Lys Tyr Arg Ser
20 25 30

Leu

<210> 109
<211> 23
<212> PRT

Sequence_Listing_0088562_015US0.TXT

<213> Campylobacter jejuni (SEQ ID NO:109 - fragment of Cj1643)

<400> 109

Gly Ile Glu Arg Pro Lys Phe Glu Asp Phe Leu Ala Gly Tyr Glu Arg
1 5 10 15

Asn Lys Ala Ser Met Leu Asn
20

<210> 110

<211> 18

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:110 - fragment of Cj1643)

<400> 110

Leu Lys Gln Pro Asn Ala Lys Leu Asn Lys Tyr Val Lys Tyr Asp Pro
1 5 10 15

Phe Leu

<210> 111

<211> 26

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:111 - fragment of Cj1643)

<400> 111

Pro Thr Pro Met Gly Asp Glu Glu Lys Leu Thr Arg Asn Asp Trp Val
1 5 10 15

Gly Ile Trp Asp Pro Asn Lys Pro Tyr Ile
20 25

<210> 112

<211> 15

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:112 - fragment of Cj1643)

<400> 112

Ala Gln Asn Ile Asp Glu Lys Asp Gln Leu Asp Phe Asn Ser Lys
1 5 10 15

<210> 113

<211> 15

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:113 - fragment of Cj1643)

<400> 113

Gly Asn Arg Tyr Leu Lys His Phe Met Lys Tyr Asn Asp Val Tyr
1 5 10 15

Sequence_Listing_0088562_015US0.TXT

<210> 114
 <211> 19
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:114 - fragment of Cj1643)

<400> 114

Val Val Arg Glu Asn Lys Ile Tyr Val Asn Asn Val Arg Lys Asn Pro
 1 5 10 15

Gln Phe Leu

<210> 115
 <211> 11
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:115 - fragment of Cj1643)

<400> 115

Pro Ala Asn Asp Leu Arg Lys Leu Asn Glu Lys
 1 5 10

<210> 116
 <211> 18
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:116 - fragment of Cj1643)

<400> 116

Asp Arg Gly Ser Thr Leu Tyr Phe Gln Val Leu Arg Asp Asn Met Asp
 1 5 10 15

Leu Asn

<210> 117
 <211> 18
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:117 - fragment of Cj1643)

<400> 117

Ala Lys Asp Leu Ser Lys Phe Asn Leu Pro Asp Ser Lys Pro Lys Pro
 1 5 10 15

Lys Ile

<210> 118
 <211> 13
 <212> PRT
 <213> Campylobacter jejuni (SEQ ID NO:118 - fragment of Cj1643)

<400> 118

Thr Lys Ile Asp Pro Lys Ser Lys Val Ser Asn Ala Gly

1

5

10

<210> 119

<211> 15

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:119 - fragment of Cj1643)

<400> 119

Leu Ile Glu Arg Lys Ser Thr Lys Leu Pro Leu Ser Asn Phe Asn
 1 5 10 15

<210> 120

<211> 570

<212> DNA

<213> Campylobacter jejuni (SEQ ID NO:120 - ACE393, ML53 (0:19))

<400> 120

atgaaaaaag ttttattgag ttcattgggt gcggtgtctt tgtaagcac aggtttgttt 60
 gctaaagaat atactttaga taaagcacat acagatgtag gttttaaaat caaacattta 120
 caaattagca atgtaaaagg aaatttcaaa gattattctg cggtgattga ttttgaccct 180
 gcgagtgtctg aatttaaaaa gcttgatgca actataaaaa tcgcatctgt aaatacagaa 240
 aatcaaaca gagataatca cttacagcaa gatgattttt tcaaagcaaa aaaatatacct 300
 gatatgactt ttacaatgaa aaaatatgaa aaaatcgata atgaaaaagg taaaatgaca 360
 ggaactttta ctatagctgg agtttctaaa gatatcgttt tagatactga aatcggcggt 420
 gtagctaaag gcaaagatgg aaaagaaaa ataggctttt ctttaaatgg aaaaatcaaa 480
 cgctctgatt ttaaatttgc agcaagtact tcaactatta ctttaagtga tgatattaat 540
 ttaaatatcg aagttgaagc gaacgaaaaa 570

<210> 121

<211> 13

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:121)

<400> 121

Asp Ile Val Leu Asp Thr Glu Ile Gly Gly Val Ala Lys
 1 5 10

<210> 122

<211> 25

<212> PRT

<213> Campylobacter jejuni (SEQ ID NO:122)

<400> 122

Phe Ala Ala Ser Thr Ser Thr Ile Thr Leu Ser Asp Asp Ile Asn Leu
 1 5 10 15

Asn Ile Glu Val Glu Ala Asn Glu Lys

<210> 123
<211> 6
<212> PRT
<213> Campylobacter jejuni (SEQ ID NO:123)

<400> 123

Leu Asp Ala Thr Ile Lys
1 5